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Exploring a University System Through Organizational Communication Routines Involving Risk

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EXPLORING A UNIVERSITY SYSTEM THROUGH ORGANIZATIONAL COMMUNICATION ROUTINES INVOLVING RISK

by

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ABSTRACT

Given the nature of differing risks that can damage higher education institutions, perception from leaders' perspectives is crucial in viewing organizational behavior regarding potential damage to the system. This case study investigated how a university staff perceives, communicates, and organizes about risk. Thirty interviews (27 one-on-one, 2 via email, and 1 over the phone) with campus leaders sought to identify how those in a higher education institution collectively communicates elements of risk within and beyond its environment while potentially forming relationships in attempts to mitigate it. An applied thematic analysis revealed that informants perceived risk as a system issue to overcome that extended beyond one's departmental duties. Risk was also predominantly communicated as resulting from political, social, and cultural voices rather than from naturalistic events. Finally, risk was organized through collaborative partnerships between internal and external stakeholders seen largely through the role of boundary spanners at the university. Findings implicate that risk in a 21st century higher education institution is perceived as an opportunity more than a danger, and such responses organize the concept through a general systems approach in which each leader is keenly aware of a larger organizational purpose, their role in fulfilling purpose, and the ability to remain open to a changing environment in higher education.

Keywords: *Risk, Organizational Communication, General Systems Theory*

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DEDICATION

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CHAPTER I - INTRODUCTION

> What might your institution face? The recurring list of natural and unnatural disasters, in no particular order, includes embezzlement, sexual harassment or assault, votes of no confidence, federal investigations, IT hacking, murder, suicide, loss of confidence by the public, hazing, alcohol abuse across campus, budget cuts, not meeting campaign goals, severe weather events, and athletic program infractions (Parrot, 2012, p. 2).

One organization that experiences myriad risks is a higher education institution. Colleges and universities were home to over twenty million two-year and four-year students in the United States in 2017 (NCES, 2018). Postsecondary schools are tasked with feeding, protecting, socializing, and training students for life beyond the academy. Unsurprisingly, then, they are criticized for failing to address concerns related to these tasks. The following is a broad but not exhaustive list of the issues that secondary institutions are tasked with confronting in their natural and social environments: designing and executing safety drills in natural disasters (Booker Jr., 2014); preparedness in an age of mounting violence like rampage shootings (Hamilton, 2014; Hemphill & LeBanc, 2010); addressing sexual assault and its mishandling (Beaver, 2017); curbing drug abuse (Watson, Arcona, & Antonuccio, 2015); treating mental health illnesses (Canady, 2017); recognizing post-traumatic stress in students (Flynn & Sharma, 2016); providing emotional and social skills for young adults (Fox & Harding, 2005); addressing racial inequality (Lucas Jr., Linsenmeyer, & O'Brien, 2015); protecting students from both hate speech and censorship (Fischel, 1995; Dunbar, 2017); creating empathic relationships

with the local community it slowly subsumes (Leeper & Leeper, 2006); and offering healthy yet affordable meals (Bruening, Argo, Payne-Sturges, & Laska, 2017).

A wide body of concerns is not a new reality for higher education institutions, though. Since the 1960s, society has demanded a larger role from them to provide guidance on political, social, moral, and practical issues:

> Various segments of the external environment of the university look to it to fulfill their expectations and to develop the resources in their area. One segment of society expects the university to pass on a cultural heritage, values, knowledge and skills; while another segment expects the university to be oriented in the future, and to develop inquiring citizens; and yet another segment cares little about the university and ignores it, except in a crisis situation when they see the university as an important instrument in society (Andes, 1970, p. 2-3).

Within, too, higher education institutions "have great difficulty defining what their enterprise is for…On just about any campus…one can find faculty members in intense debate about what a college education entails and what the mission of their institution should be" (Piereson, 2011, para. 3).

Perhaps the greatest threat to higher education, however, is the risk that comes with all public systems: money. Since the 1990s, public funding for higher education has shifted dramatically from the federal and state to the university system level where performance requirements are now the norm. So while the higher education system internally debates its purpose, the external environment judges its output. "Again, the universities have a major public relations exercise to perform, to convince the wider

society that supports them that they give value for money and deserve the autonomy and academic freedom they claim" (Perkin, 1997, p. 32).

Beyond external expectations lie organizational ones as well. Campuses contain multiple administrative units, student residence halls, instruction buildings, health clinics, and event facilities that house anyone from the part-time student to the tenured faculty member, all of whom "the institution is legally and morally responsible to protect…This duty of care adds a dimension to crisis planning that separates institutions of higher education from business and civic organizations" (Booker Jr., 2014, p. 17). Thus, the issues that encompass higher education institutions suggest the large number of potential relationships they contain in the area of risk communication; these are key to provide the processual message exchange between managers and stakeholders with regard to potential risks within their environment (Littlefield & Sellnow, 2015).

How exactly, then, do leaders in higher education perceive and communicate about risks abounding in such a large number of issues and expectations? Identifying risk in organizational life often comes down to environmental scanning and issue management (Coombs, 1999; Seeger, Sellnow, & Ulmer, 2003). That is, organizations that identify trends and potential confrontations with key stakeholders can position themselves to avoid harm, or the negative consequences resulting from risk encounters. However, organizations that rush to respond to environmental uncertainty by quickly adapting organizational structure to meet outside demand sometimes risk damaging internal processes built on relational structure and measured, analytical decision-making (Miller, 1992). There is a fine line, so to speak, between balancing the demands of a rapidly changing external environment while maintaining some sense of normalcy for its

internal one. This is the conundrum that leaders face when dealing with an uncertain future. If calculating risk is a fact vs. feeling task (Ropeik, 2006) filled with a potentially endless questioning of one's vulnerability, or a "bottomless barrel of demands" (Beck, 1992, p. 23), examining how leaders from a historically decentralized organization like a university come to agree upon risk identification may yield practical results for similar entities that want to position themselves advantageously in an uncertain future.

Answering this challenge of unifying risk identification are organizations that view themselves through a stakeholder perspective. Emanating from an open systems philosophy of interconnectivity (Spicer, 2007; Stoffels, 1994), stakeholder perspectives of management seek to balance the interests, needs, and desires of anyone who may have a 'stake,' or potential benefit from the organization's viability, with the need for financial survival of the actual organization (Fontaine, Haarman, & Schmid, 2006). By considering all those who have some vested interest in the organization's well-being, risk becomes clearer when the environmental position of the institution emerges (Davila, Elvira, Ramirez, & Zapata-Cantu, 2012). That is, the organization becomes tangible once it is viewed through the stakeholder relationships that undergird its sustainability. Grasping stakeholder concerns, though, is complicated because management needs to consider a large volume of information, including "both trends and abrupt shifts in societal norms and values; personal preferences and life styles; community attitudes and support; customer tastes; suppliers' business practices; shareholder risk/reward expectations; and employee health, safety, morale and commitment" (Stoffels, 1994, p. 50-51).

Organizational leaders cannot isolate themselves from their environment under a stakeholder perspective. Those who operate as boundary spanners, or members who

transcend organizational barriers, can create networks beyond the organization with those who have similar interests (Graber, 1992). Boundary spanners utilize outside organizations as a conduit to gather information about stakeholders, and this is particularly useful during times of vulnerability because organizations suddenly need to look beyond their system and into an uncertain and complex environment for potential answers (Shrode & Voich, 1974). Risk information gathered from a stakeholder perspective of the boundary spanner is a higher level of functioning that can "consider the system as well as the team in which individuals are operating" (Fraher, 2011, p. 2011). The relationships that a boundary spanner cultivates need to occur during risk processes—not crises—because "failure to develop networks may cripple the performance of agencies that are thrust into unplanned working relationships" (Graber, 1992, p. 190). This is why relationships with stakeholders—administrators, faculty, staff, government, community, and even competitors—all need development sooner rather than later. "The time to build a team, partnerships, goodwill, and alliances isn't when you need them most" (Parrot, 2012, p. 2). Thus, the shape and size of relationships that a university develops in order to combat risk display how a system, or "a set of interrelated parts, working independently and jointly, in pursuit of common objectives of the whole, within a complex environment" (Shrode & Voich, 1974, p. 122) functions during an uncertain future for higher education in the 21st century.

This project treated risk as both an objective and subjective entity (Aven & Renn, 2009; Rosa, 1998) that organizational stakeholders construct through interactive communication such as face-to-face and textual messaging (Sellnow, Ulmer, Seeger, & Littlefield, 2009). In order for a university to function and effectively deal with risks that

may not immediately be known to those outside one department, further investigation is warranted into how each constructs, communicates, and enlists help from others within the university system. A comparison of department leaders' approaches to risk communication processes can help identify how the system operates as a whole, and, therefore, reveal how communication organizes collaborative effort.

This dissertation will begin by outlining risk, organizational risk, and related communicative practices. Key organizational approaches including systems theory and autopoeisis along with boundary spanning, organizational learning, structuration, threat rigidity, and sensemaking will be detailed. Such a background is necessary to understand how organizational leaders receive information, process its meaning, and communicate it through systemic principles regarding risk. A case study method will follow to examine how and if each conceptual framework applies to a 21st century higher education institution. An applied thematic analysis will then dissect participant interview data through the inductive exemplar approach. A discussion section will include insights developed and themes generated from participant data that serve to illuminate the risk communication process at the university. Lastly, limitations of the current study will be looked at closely followed by its contributions for future directions in the field of risk perception and organizational communication.

CHAPTER II – LITERATURE REVIEW

Risk tends to historically symbolize a dichotomy of either a helplessness in dealing with it or a successful handling of it. Although the possibility of danger has always been part of the human experience, harm inflicted upon common citizens was historically attributed to the acts of gods and mythological creatures (Ritzer, 2005). For Ancient Romans, though, uncertainty of the future wasn't so much viewed as a potential harm as it was a potential opportunity for good things to come, or an "aleatory society…they managed danger by repeatedly reminding themselves to face it head on" (Beard, 2011, p. 98). Risk, however, is a more modern term that became part of the English vernacular during the Middle Ages as faith in ancient mythologies and religious officials declined (Breakwell, 2014). Since the very institution—church—that once held certainty for the masses had now become questionable, long-held views of divine fate no longer governed everyday behavior. Suddenly, one's fate could be controlled because "there is the possibility that individual action, through the expression of free will, may influence whether harm materializes" (Breakwell, 2014, p. 2). Since this 'freeing' of thought, societies have been trying to quantify, package, and predict risk so as to avoid its consequences to physical health, economic security, and sociocultural relationships. Risk, then, requires a projection about one's action and how it will affect his or her future. "It presumes decision-making and inherently contains the concept of control. As soon as we speak in terms of 'risk,' we are talking about calculating the incalculable, colonizing the future" (Ritzer, 2005, p. 648).

Risk is an enduring characteristic of modernity and mankind's obsession with looking forward. As Giddens (1990) noted, modernity is a constantly reflexive activity

that demands adaptation, or protecting one's self from the danger that comes with seeking new environments:

> The notion of risk becomes central in a society which is taking leave of the past, of traditional ways of doing things, and which is opening itself up to a problematic future…the 'openness' of things to come expresses the malleability of the social world and the capability of human beings to shape the physical settings of our existence (p. 111).

Reflexivity, however, does not mean that we get better at controlling risk. It simply means that we are aware of our vulnerabilities, the consequences of our actions, and the interconnected nature of risks on an ecological, financial, and terroristic level (Latour, 2003). That is, prior to globalization, risk was endemic to a physical location because of the nation-state (Beck, 1992). Dealing with danger meant protecting your own land and money. However, with the increased interactions between markets, cultures, and politics because of globalization, our very lives become intertwined to the point that we realize how little we can manage. Society can "feel powerless in the face of risk: for in an increasingly global world, the causes of hazard seem ever more outside our control" (Beard, 2011, p. 90). We are more aware of the fragility of the physical environment because of consumption, the speculative voices that affect monetary systems, and the randomness of violence that strikes with little to no warning. Thus, "control over actions is now seen as a complete modernist fiction. In second modernity, we become conscious that consciousness does not mean full control" (Latour, 2003, p. 36).

However, while perceiving risk may be an exercise in unpacking anxieties, communicating about risk has historically sought to eliminate anxiety or address the

multiple voices which construct it. Organizations need to adapt to outside voices through practices like issue management that seek to identify the facts, value, and policies that stakeholders uphold (Seeger et al., 2003). When an organization is positioned unfavorably with policy makers, the public, or consumers, boundary spanners are enlisted to gain information and communicate effectively with diverse audiences in order to reposition the system favorably (Ancona & Caldwell, 1992). Communication practices of boundary spanners typically revolve around making relationships with environmental leaders who contain key resources that sustain their system (Stoffels, 1994). Thus, boundary spanners must be a marketer who represents the sustainable future of the system positively as well as a knowledgeable professional regarding public issues in order to gain key resources (Hult, 2011). Boundary spanners, then, offer a key look into the perception of risk to organizational resources and the communication that signals systemic reaction towards such threats as they emerge in the environment.

A. Risk Communication

For organizational leaders, the two predominant perspectives on risk communication consists of quantitative or qualitative views. A quantitative perspective is a rational approach that employs formal logic—mathematics—by identifying the probability of physical damage to a system, which includes loss of life, property damage, and environmental costs (Leiss, 1996; Starr, 1969). Quantifying risk in this way is built upon collecting past data on physical damages and in turn calculating the probability of occurrence and cost for similar, future events. These risk models can then aid the public in predicting a likelihood of danger and "help elucidate questions such as a population's exposure to a hazard, or a nation's dependence on sectors affected by hazards" (Jackson

& Cornell, 2013, p. 5). Quantitative models are used to increase our cognitive understanding of how risk operates (Slovic, 1987), which is a natural outgrowth of modernity and the belief that all knowledge is independent of its researcher and is therefore able to be gathered and studied (Beck, 1992).

In general, then, a quantitative perspective of risk implies a calculation, or estimate, of the probability of encountering a hazard and its detrimental consequence (Breakwell, 2014). When calculations cannot be made, instincts guide us through uncertainty, or the absence of information needed to make a prediction about the future (Ulmer, Sellnow, & Seeger, 2011). Even instincts, though, are guided by some sort of probability. That is, in the likelihood of facing some unknown, we link our current predicament to previous experiences of uncertainty. This enables us to calculate some sort of certainty, as Frank Knight's (1921) influential *Risk, Uncertainty and Profit* detailed:

> the existence of a problem of knowledge depends on the future being different from the past, while the possibility of the solution of the problem depends on the future being like the past…we analyze our world into objects which behave more or less consistently. That is, we recognize in things the unchanging property of changing in certain ways. If this process could be carried out to completeness, we should have a completely knowable world. It would also, however, be in the practical sense an unchanging world. It is fact familiar to students of our thought process that we thus explain change by explaining it away (p. 313).

Therefore, even when we are uncertain and lack information to make a risk prediction, we still make decisions consistent with the choice of past uncertainties.

Probability was the backbone of the quantitative risk assessment, and, consequently, risk management in the mid to late 20th century (Leiss, 1996). As modernization exploded post WWII, industries of technology, banking, and insurance borrowed economic cost/benefit models for risk assessment. The philosophy was simple: If we know how often things go wrong and their resulting monetary cost, we can accrue the real risk of a certain event. This is the post-positivist logic of risk assessment that treats it as a natural reality that can be gathered, studied, and predicted. Thus, formulas of probability multiplied by consequence dominated risk assessment because they simplified utility, or the rational pursuit of assets, into mathematical models (Kahneman, & Tversky, 1979). Quantitative risk assessment, then, passes "the three-part test of sound scientific investigation: consistency in internal logic, empirical support, and predictability of outcomes under like conditions" (Rosa, 1998, p. 20).

It should come as no surprise, then, that sociological models of risk assessment followed this logic. Starr's (1969) seminal piece on risk assessment ushered in a new era of consideration but with the same post-positivist mentality. Despite the explosion of technological innovation and prosperity in America, there remained dangerous consequences of it, such as injury, deformity, and loss of life (Perrow, 1984). Thus, it was up to the scientific community to develop

> quantitative measures of benefit relative to cost for an important element in our spectrum of social values—specifically, for accidental deaths arising from technological developments in public use. The analysis is based on two assumptions. The first is that historical national accident records are adequate for revealing consistent patterns of fatalities in the public use of technology…The

> second assumption is that such historically revealed social preferences and costs are sufficiently enduring to permit their use for predictive purpose (Starr, 1969, p. 1232).

Therefore, loss of life became a priority in risk assessment by collecting observable data in order to predict future occurrences. This is still a strong and expected practice in risk assessment, particularly in the insurance and disaster management industries where "risk is constructed as extrinsic to communicative practices… much of this work is concerned with making sure that training programs are in place" (Bartesaghi, Grey, & Gibson, 2012, p. 2). So while quantitative risk assessment began to identify the social impacts of hazards, its legacy largely began as a post-positivist outlook of data collection and predictability in efforts to control for future occurrences (Fischhoff, 2012).

A quantitative risk perspective, however, is missing a key voice in its construction: people. Risks are not risks until the public is allowed in their construction (Ulmer et al., 2007). This embeds risk in the qualitative perspective (Rosa, 1998). Historically, risk was predominantly communicated quantitatively and did not identify the social, cultural, political, and psychological factors which can influence risk perception (Fischhoff, 2012; Kasperson et al., 1988). Individuals identify things they can control in their environment and thus risk is calculated differently from person to person (Dewitt, Fischhoff, Davis & Broomell, 2015; Slovic, 1987). Thus, risk is a form of social construction, or a concept that can historically change due to how people view it, talk about it, define it, and act towards it "by linking the putative legitimacy of ideas to the interests of actors who are sufficiently powerful to influence the standards by which their legitimacy is measured" (Weinberg, 2014, p. 5). In other words, society defines what is a

risk to them and then reinforces that definition by continuing to communicate about it through that definition.

Social constructions of risk knowledge do not follow predictable patterns of quantification like in the natural sciences. They are instead developed phenomenologically and supported socially through "personal beliefs, affects and experiences irrespective of their validity… all need justification that must also be plausible to others" (Aven & Renn, 2009, p. 6). This conceptualization rejects post-positivist approaches towards risk assessment of prediction and control (Rosa, 1998). In this way, a socially constructed world facilitates interpretation through cultural and political lenses. This means that multiple factors may be at play when interacting with risk because "Social actors do not see the world with pristine eyes, but with eyes mediated by experiences in the world and by social forces. Scientists, too, see mediated worlds – worlds mediated by paradigms, by biases, and by social values" (Rosa, 1998, p. 22). Therefore, risk is in the eye of the beholder. This era in risk construction effectively changed "risk assessment" (a technical term reserved for risk experts) to "risk perception," or the subjective interpretation of risk (Leiss, 1996).

Risk assessment gaps existed between the public and experts' perception of risks in the late 20th century. In the 1970s and 80s, disasters such as Bhopal, Chernobyl, Love Canal, and Three Mile Island severely eroded public faith in corporate entities, government officials, and the science that supported their claims about safety (Kasperson et al., 1988; Perrow, 1984). In these instances, sociologists and anthropologists stressed the perceptive element of risk that natural science failed to capture (Pidgeon, 1997). Technological risk assessment neglected to "predict the breadth and seriousness of those

impacts; an accident that takes away many lives may produce relatively little social disturbance if it occurs as part of a familiar and well-understood system, but think about the opposite" (Fischhoff, Slovic, Lichenstein, Read, & Combs, 1978, p. 148).

The turn towards qualitative differences in risk assessment was not just from an ontological view, though. It was also an epistemological break from objective to subjective measures of knowledge (Renn, 1998; Slovic, 1987). That is, risk assessment now became synonymous with risk perception that highlighted how people perceived risk assessment as knowledge unto itself (Freudenberg, 1989). Simply put, individuals differ on risk assessment based upon "natural human variability in sensitivity and behavior, uncertainty in the knowledge of the potential for human exposure…Consequently, subjectivity has played a major role in risk assessment since its inception" (Ladd & Travis, 1995, p. 105). For example, although driving represents a statistically greater threat towards one's livelihood, it is feared less than nuclear meltdowns and terrorism. The latter represent dread, or a lack of control, so despite its statistical rarity, "the more people want to see its current risks reduced, and the more they want to see strict regulation employed to achieve the desired reduction in risk" (Slovic, 1987, p. 283).

Risk managers began to employ these social considerations when crafting messages to the public in the late 80s and early 90s. According to Heath and Palenchar (2000), risk communication, or the practice of disseminating messages to the public about risks and how to prevent or mitigate them, now involved both a technical and perceptual element. That is, the technical component was meant to satisfy human desires to control events by providing statistics on the likelihood of occurrence, while the perceptual component provides heuristics and affective displays of the risk (Heath & Palenchar,

2000). For example, a technical frame may display the percentage of deaths from undercooked hamburgers in a given year, but the perceptual frame provides the impact of losing a loved one because the hamburger was undercooked. Both work together and represent the second phase of risk communication that focused on message variables and persuasion rather than one-shot dissemination (Sellnow et al., 2009). These attempts used demographic and psychographic information to persuade consumers by appealing to "the intrinsic legitimacy of the audience's perception of the situation" (Leiss, 1996, p. 89). Such attempts shifted risk communication from a noun to an adjective. That is, risk was now viewed as a descriptor that needed to adapt to different worldviews rather than a concrete symbol of universal understanding (Leiss, 1996). As Fischhoff (2012) explained, this phase in risk communication arose out of the failures of assuming that the public could interpret the probabilities and technicalities of risks in the same fashion as risk assessors. Thus, analysts needed to understand the cognitions that enabled individuals to process risk information because "communications about risk involve a gush of issues, with little selection…doing so requires thinking, in detail, about recipients' circumstances" (Fischhoff, 2012, p. 213).

Circumstances shape risk messages in unpredictable ways. Kasperson et al. (1988) showed that risk is amplified or attenuated through psychological, social, and cultural frameworks. Technical risk assessments, they argued, could not predict the catastrophic fallout from Three Mile Island. Although the plant averted meltdown and casualties, public faith in nuclear energy, government oversight, and technology eroded quickly, and, one could argue, has not recovered (Fraher, 2011). This is because risks are communicated through two networks: sources and signals (Kasperson et al., 1988).

Sources are those that transmit information about risks, but signals are the interpretation of the risk that amplify or attenuate them through symbolic exchange. Thus, a scientist might be a source of communicating a risk but its signal gets changed by a politician before it reaches the public. Additionally, risks have to be processed, which in essence becomes its own perceptual signal. Honest communication of what one thinks about a risk is still processed through one's cultural and social cues.

For example, Venette's (2008) look at coastal Mississippians' decision not to evacuate prior to Hurricane Katrina indicated that residents compared the potential storm to previous ones which they had survived. Residents withstood those storms, and, therefore, didn't evacuate (Venette, 2008). However, there were multiple instances of attenuation occurring in this example. First, there is no indication that The National Weather Service compared it to past storms, but "The media reported that this hurricane was similar to others faced by the community before" (Venette, 2008, p. 203). This indicates a signal addition that attenuated the risk of the storm while also reducing uncertainty about its potential impact. Furthermore, a cultural community (public officials, media, and locals with similar past experiences) further seized on this as a signal that risk was low. "Nobody was quoted as saying that because of experiences with past storms, they were planning to evacuate. Reporters did not use stories of previous storms to appeal to residents to leave" (Venette, 2008, p. 203). Therefore, even those who have dealt with similar risks in the past are not immune to their own cultural signals and "can also act to attenuate risk" (Kasperson et al., 1988, p. 184).

Risk communication, then, often begins from an initial receiver's perceptual process of the risk before it is transferred to others. A calculation, conversation, or

thought that enters into the decision making process as a potential harm is sometimes referred to as a threat. Individuals and the organizations they operate experience threats when a high level of performance is perceived to be needed in order to overcome some impending sanction (Daly, Der-Martirosian, Ong-Dean, Park, & Wishard-Guerra, 2011). The pressure of an impending sanction can make organizations act like how an individual does when confronted with a threat by becoming rigid in information processing and control of operations (Staw, Sandelands, & Dutton, 1981). That is, when faced with an impending pressure that can damage them "a system's behavior is predicted to become less varied or flexible" (Staw et al., 1981, p. 502). Threats cause organizations to become narrow-minded and fall back on the same routines and resources which have previously relieved them of the threat (Gilbert, 2005). Typically this entails a limiting of voices, or inputs regarding information about the threat, and a decision making process that becomes designated to a small group or even one member of the organization. "Decision makers, in effect, cut themselves off at the very moment when timely information is most critical" (Seeger et al., 2003, p. 10). Leadership that treats threats through this perspective operate through a transactional framework that relies on performance measures, rewards, and enforcement of routine criteria that historically has been used to mitigate or eliminate the threat. However, leadership that treats threats through a transformational framework go beyond traditional measures to search for new learning opportunities regarding the presence of the threat, challenge employees to look beyond performance measures, and raise the overall conscious of the organization to a new level of understanding regarding the threat (Daly et al., 2011). Thus, understanding how leaders communicate about risk can be defined more clearly by understanding their perception of a threat, how open or

closed they are in terms of information exchange regarding the threat, and who they choose to enlist with its mitigation effort. Risk, then, is an information processing issue with regard to threats and a world of constant pressure. For university leaders and managers of risk, it is also worth noting how risk is communicated and perceived sociologically to understand the consistent information flow of risk voices that enters into organizational systems.

Threats of impending danger are hastened in an informational environment of constant streaming, speculation, and reaction to potential risk. While pre-modern figures like the church and the monarch provided certainty for its citizens, the modern proliferation of science and reasoning leaves "questions where once there appeared to be answers…a general awareness of the phenomenon filters into anxieties which press in on everyone" (Giddens, 1990, p. 49). Beck (1992) traced risk in this sense as a product of too much information that is unique to modernization. Risk in ancient, medieval, and preindustrial times was experienced through the senses: a foul odor indicating decay, a dark alley indicating danger, or a sour taste indicating spoil. Risk in the 21st century, though, is a product of hidden danger that threatens the life of security that we already have obtained through industrial and technological advances. Dangerous food additives, odorless gases, contaminated water, and the instability of the global economic market are all things that are disseminated to us indirectly through a relentless news cycle. Thus, we project upon our world the consequences of not stopping all of these risks from materializing:

> What is at stake in the public dispute over the definition of risks is revealed here in an exemplary fashion: not just secondary health problems for nature and

> mankind, but the social, economic and political consequences of these side effects—collapsing markets, devaluation of capital, bureaucratic checks on plant decisions, the opening of new markets, mammoth costs, legal proceedings and loss of face…Averting and managing these can include a reorganization of power and authority. Risk society is a catastrophic society. In it the exceptional condition threatens to become the norm (Beck, 1992, p. 24).

The advancements in communication technologies, such as television and the internet, display reality as a continuously reflexive practice aided by modernity's time-space distanciation, or "the conditions under which time and space are organized so as to connect presence and absence" (Giddens, 1990, p. 14). Ancient Roman citizens couldn't experience the risk of those in other lands, yet current day individuals in any land can experience any risk through our technological mediums connecting the world. It is broadcast and discussed at-length how the markets in China, the rainforests in Brazil, and the unrest in the Middle East threaten our immediate and future lifestyles. We may be *absent* from those physical settings but we are *presently* aware of their impact upon us through modernity's ability to overcome time/space barriers. Thus, those who are absent can still contribute to risk discourses because physical settings do not impede awareness like in pre-modern times. Instead, "place becomes increasingly phantasmagoric…locales are thoroughly penetrated by and shaped in terms of social influences quite distant from them...the visible 'form' of the locale conceals the distanciated relations which determine its nature" (Giddens, 1990, p. 19).

Furthermore, Giddens (1990) believed that modernity's time-space distanciation disembeds social systems, or "the 'lifting-out' of social relations from local contexts of

interaction and their restructuring across indefinite spans of time-space" (p. 21). Social practices were embedded in and corresponded to traditions in pre-modern times. That is, tradition determined what something meant, and people acted accordingly. Knowledge, then, was situated on a timeline in relation to tradition, "which inserts any particular activity or experience within the continuity of past, present, and future" (Giddens, 1990, p. 37). In modernity, however, traditions are subverted through reflexivity, or the constant reexamination of one's activity and its progression towards improving the system. It is a practice of "systemic reproduction such that thought and action are constantly refracted back upon one another…social practices are constantly examined and reformed in the light of incoming information about those very practices, thus constitutively altering their character" (38). Of course, this is the appeal of reasoning, formal logic, and the scientific method, all of which feed the system new interpretations of its evolving behavior. A feedback model that continues to take in inputs, process them, and spit out a new result allows a system to adapt to and thrive in its environment. Systems that are open to new information quickly leave tradition and the past behind because of "'futurology'—the charting of possible/likely/available futures—becomes more important than charting out the past" (Giddens, 1990, p. 51). Thus, we are not beholden to dogma and the unchanging absolutes of divinity, tradition, and authority.

By constantly reassessing and moving toward a perceived sense of certainty, however, we create more uncertainty and awareness towards risk. Reflexivity, according to Giddens (1990), is not the product of post-modernity but a radical form of modernity that

> is thoroughly constituted through reflexively applied knowledge, but where at the same time we can never be sure that at any given element of that knowledge will not be revised…in science, nothing is certain, and nothing can be proved, even if scientific endeavor provides us with the most dependable information about the world to which we can aspire. In the heart of the world of hard science, modernity floats free (39).

Nowhere is this more evident than in institutions shaped by the practices of social sciences. Because of their 'reentry' into discourses about observable events (Yin, 1993), they continually shape reality and the ways in which it is presented to audiences. For example, Giddens (1990) provided marriage and its statistical divorce rate as a means to understand the role qualitative discourse plays in reflexive modernity and risk. With divorce rates being over fifty percent, couples looking to marry aren't just aware of the risk of failure. They then reflect on the institution of marriage itself along with negotiating familial roles, sexual behaviors permitted, parenting styles and their potential impact, and how the community views all of these practices. It is the ability of the social sciences to study and reflect upon hard data (statistics) that "continually 'circulate in and out' of what it is that they are about. In so doing, they reflexively restructure their subject matter, which itself has learned to think sociologically. Modernity is itself deeply and intrinsically sociological" (Giddens, 1990, p. 43).

Reflexivity has made us more aware of risk information, but we aren't always sure what to do with this information. The classic definition of risk—probability, or the ability to make a calculation based upon some relevant information about a hazard—is then compromised by equivocality, or too much information. Equivocality challenges us

because it is produced by sometimes disastrous situations in which no course of action and response is immediately apparent. Organizations, like individuals, have "an ongoing need to determine how to know what to think" (Seeger et al., 2003, p. 22). They want to predict everything so as to avoid any potential risk, and, thus, they search for even more information to make sense of the situation. While risk managers want to control everything, there is an acceptable level of ambiguity in dealing with risk outcomes for the simple fact that new situations create an opportunity to learn (Sandman, 2006). "It is an awareness that there may be something more to understand but we just do not know what. The anticipation of the inevitability of the unknown, and thus unexpected, is now recognized in risk discourses" (Breakwell, 2014, p. 7). Therefore, people in organizations do not rest on their laurels when calculating risk. Members search for more and more information in order to make a confident decision about a risk. Processing risk in this way can lead institutions to reproduce themselves by the social structures they create, reinforce, inhabit, memorize, routinize, and challenge regarding a handling of risk. Thus, this study seeks to understand how boundary spanners react to risk in a world that continually demands discussion of it.

RQ1: How do campus leaders perceive, process, and communicate risk within the university system?

B. Systems

Organizations need to perceive threats and process them as potential risks by gathering information from their environments. A general systems approach provides a broad framework for understanding how this process occurs. A system is a broad term that simply connotes a "set of objects or entities which interrelate with one another to

form a unique whole" (Littlejohn, 1978). Boulding's (1956) influential essay, "General Systems Theory--The Skeleton of Science," remains a pioneering philosophy of the connective power of a systems approach. He defined a systems approach as "all thinkable relationships abstracted from any concrete situation or body of empirical knowledge" (Boulding, 1956, p. 197) and attempted to explain that all systems—mechanical, biological, physical, human, social—are built upon the same foundational principles. That is, each system has a set of components, or subsystems, that function interdependently of one another by responding and adapting to its environment. As systems grow, they become more complex, and, thus, require a framework to understand how and why things work. Of course, a systems approach can also identify why something didn't work, which often comes down to a lack of communication between subsystems, as Boulding (1956) explained:

> The spread of specialized deafness means that someone who ought to know something that someone else knows isn't able to find it out for lack of generalized ears. It is one of the main objectives of General Systems Theory to develop these generalized ears, and by developing a framework of general theory to enable one specialist to catch relevant communications from others (p. 199).

Thus, systems seek to coordinate action in fulfillment of goals through effective communication.

There are six basic assumptions that undergird a general theory of systems. First, all systems have purposive behavior. This means that systems have goals in which all their parts work toward achieving through a creation of "value by combining and utilizing resources in some particular manner" (Shrode & Voich, 1974, p. 124). For

Churchman (1968), all systems need vision and leadership that thinks through its purpose before acting to create that value. This thinking process "goes on continuously…It does not postpone its thinking until a crisis is reached…Each step of the plan is justified in terms of the overall objective" (Churchman, 1968, p. 8). Thus, a system's purposive behavior is always considered throughout its lifespan.

The second assumption is the concept of wholism. Systems are not a sum of their parts. Rather, they are simultaneously free and constrained by their interdependence with their subsystems (Littlejohn, 1978). Therefore, one cannot simply separate one part from the others to gain an understanding of the system. The system as a whole must be analyzed as its parts interact in order to completely understand it. This is the descriptive, hierarchical approach to a study of systems that theory provides (Shrode & Voich, 1974). The third assumption is perhaps the most important for organizational systems: openness. All living systems must remain open to receiving input from their environment because "all real systems are acted upon by their environment, and in turn they act upon their environment" (Shrode & Voich, 1974, p. 127). Open systems possess equifinality, or the ability to reach a desired state from any beginning state (Littlejohn, 1978). Openness and equifinality of systems work by converting inputs from the environment into outputs, or the values discussed in purposive behavior. Thus, transformation is the fourth assumption of system behavior, and it consists of the specific activities that organizations employ to interpret inputs and create outputs that keep the system alive. The fifth assumption is interrelatedness, which is similar to wholism but different in that it looks specifically at the interactions of each part of a system. So while wholism takes a sky-level view of a system, an interrelated, ground-level view dissects the relationship between each specific

part so “large, complex systems can be successfully subdivided into smaller, less complex subsystems, which are easier to analyze” (Shrode & Voich, 1974, p. 130). The sixth and final assumption of systems theory is that of a control mechanism. All systems need to respond to turbulence in its environment by seeking to return back to an equilibrium, and “maintaining this state of balance requires the system to evaluate changing conditions and adjust to them through the processes of feedback and adaptation, utilizing some type of control mechanism” (Shrode & Voich, 1974, p. 131). The concept of feedback derived from cybernetics and used primarily in computer science and information processing is a large contributor to this assumption (Littlejohn, 1978).

These six assumptions give systems a descriptive approach in viewing general phenomena by creating a cyclical nature of reality. That is, organizations first define their purpose based upon the value they can create for their members and their environment. Next, they take stock of the effect that this creation has on the whole of the system (costs, resource allocation/acquisition, etc.). Organizations then take stock of how the environment responds to the system’s purpose. An outcome analysis and process analysis is then interpreted through the transformative assumption to ensure that inputs are efficiently produced as outputs. Again, inner parts are analyzed to ensure that each are working efficiently with another. Lastly, the feedback, or control mechanism, regulates every step that came before it. The system then adapts to a new input (which was just recently its own output) and begins the whole process over again. This is the practical utility of a systems approach:

> The very advantage of systems theories lies in their techniques that permit the identification of essential nonrandom regularities among entities (that is, repeated

> patterns), which in turn permits the analysis of the system as a whole. If, for example, a systems analysis of a school district were to find that teachers in the elementary schools regularly fail to show knowledge of central office directives, a smart superintendent will not blame the quality of the individual teachers, but will look for the place where the system itself breaks down in its communication functions (Quantz & Boyles, 2017, p. 111).

Therefore, a systems approach provides a holistic view of a system, its interconnected parts, and a flow of inputs/outputs within and beyond its sometimes turbulent environment.

Systems theory invites abstractness, though, because for all of the theory's good—interdisciplinary effort in matching biological processes to complex organizations and a shared vocabulary of interdependency, parts, subsystems, components, etc.—it is more descriptive than prescriptive (Bess & Jay, 2007). Beyond applying a more strict adherence to cost/benefit models of inputs and outputs for business efficiency (Shaw, 2009), it is more subjective than objective as to what *is* the system, its subsystems, its environment, etc. One person's system could be another's subsystem and vice versa. Therefore, it is difficult to see systems theory as purely functional (Bess & Jay, 2007; Littlejohn, 1978) or structurally predictive (Quantz & Boyles, 2017). Furthermore, although a systems approach can show how communication flows between subsystems, it fails to identify the communication that displays shared meaning and purpose among its members (Manning, 1992).

Ultimately, though, systems approaches provide researchers with a holistic understanding of the organization as a whole of interrelated parts. In order to respond to

an environment of change, systems create differentiation, or specialization, that adds another subsystem to its overall system. At the same time, however, systems must also integrate into the larger environment in order to process the information which demanded such differentiation. Thus, "the more an organization differentiates, the more it has to integrate itself; if not it will lose its identity as a system" (Schwandt & Marquardt, 2000, p. 161). Organizations, like individuals, differentiate to thrive in a competitive world but also integrate by pulling from similar sources of informational energy and, thus, need to balance themselves. Organizations use systems to "address the demands and expectations of the recipients of its outputs—its products and services—while at the same time attending to its need to link and coordinate its internal component parts— departments and people" (Bess & Jay, 2007, p. 93). As a general framework for understanding our purpose in life, we tend to think in a systems approach, i.e., our relationships and how they interact with us obtaining our goals. It is the forethought of a systems approach that structures this study:

> The general systems conception incorporates each of the above, and yet it is still more. Taken as a whole, general systems offers a 'world view' about how things (e.g. machines, people, organizations and societies) operate in 'empirical reality'; or in Philosophy of Science terminology – a paradigm (Shaw, 2009, p. 852).

Moving forward, systems theory will provide the background model for this case study approach that analyzes an organization as it responds to its environment that increases in complexity. How organizational members receive, develop, and reinforce such policies toward environmental complexity can be better understood through structuration theory.

C. Structuration Theory

Giddens (1984) described structuration theory as a rethinking of sociological theory formerly dominated by functional and structural approaches. Functional approaches treat society much like biological systems which grow and adapt to its environment, while structural approaches presuppose a frame, or "structure," which society imposes upon its environment. These two approaches neglect the ability of the individual, group, and collective in enacting agency in their world because "both structuralism and functionalism strongly emphasize the pre-eminence of the social whole over its individual parts (i.e., its constituent actors, human subjects)" (Giddens, 1984, p. 1). Structuration, thus, emphasizes *agency*, or the capability of actors to continue on or alter practices, traditions, policies, and institutional ideals despite the separation of time and space from its origins. That is, organizational actors reproduce the activities and meanings of those who came before them, which, in turn, uphold an *institution*. Such practices reinforce organizational purposes and ideals, yet actors are neither functional nor structural in this approach. A functional approach to organizations would mean that each time the environment changed, so would the organization, while a structural approach to organizations would mean that there was only one way to conduct activity. Structuration challenges functional and structural approaches through reflexivity and agency, "which concerns events of which an individual is the perpetrator, in the sense that the individual could, at any phase in a given sequence of conduct, have acted differently" (Giddens, 1984, p. 9). Therefore, organizational actors reproduce the activities and meanings of the institution while still maintaining the agency to create new modes of conduct and meaning for the organization.

Structuration assumes that structures are both the mechanism through which we engage others and the subsequent meaning that emanates from that engagement. Structures provide guidelines for acting and interpreting social reality because they are "the properties allowing the 'binding' of time-space in social systems, the properties which make it possible for discernibly similar social practices to exist across varying spans of time and space and which lend them 'systemic form'" (Giddens, 1984, p. 17). Structures ultimately refer to the rules and resources that individuals call upon when acting, interpreting, and transforming their social realities (Giddens, 1984). Over time, the ability to continually call upon these rules and resources creates stocks of knowledge, or 'common sense.' In other words, after working for so long in an organization, members know how things work, what they mean, and how to 'get things done' in the organization without having to explicitly make clear each and every time they act. According to structuration theory, there are three types of these common sense structures known as domination, legitimation, and signification. Dominant structures include allocative and authoritative resources. Allocative resources are the materials that actors draw upon to enact power over their environment, while authoritative resources refer to the nonmaterial resources that humans draw upon to enact power over other humans. Legitimation refers to the normative rules that structures sanctions in social reality. Signification refers to interpretive structures of language which are often "modes of typification incorporated within actors' stocks of knowledge" (Giddens, 1984, p. 29). For example, the rules and resources that allow an institution like capitalism to be both a structure and agent of itself illustrates structuralism's enabling and constraining capabilities of reality (Tracy, 2013). Organizations that profit from capitalism's ideals

employ allocative resources, or their money, to control lines of production and distribution over the physical environment. They also employ their authoritative resources, or administrative power, to extend their hierarchical control over employees not physically present who oversee production and distribution. Legitimation, or legal sanctions, operate as rules that organizations must follow, such as anti-trust laws, in order to be considered legitimate. Finally, signification rules, or the discourse that surrounds such structures, reflexively interprets ongoing practices. If employees, the community, or the media begin to discuss the appropriateness of the organization's behavior and use of resources, the courts may sanction the organization and capitalism in general through its rules (this, of course, can work the opposite way in the reduction of rules). The structures of domination, legitimation, and signification in this instance are both a constraint on the institution of capitalism and the organizations under its system as well as an enabler of their potential to alter those very constraints:

> Agents' drawing on rules and resources is thus an alternative formulation synonymous with their drawing on structures. Agents, for Giddens, are thus neither free-floating subjectivities nor are they objectively determined by structures. Rather, social practices are the skilled accomplishments of capable agents who know a good deal about their circumstances but whose knowledgeability is nevertheless bounded by unknown conditions and consequences of action and whose capabilities are bounded by the limits of their power resources (Ritzer, 2005, p. 323).

In this way, social reality operates through the *duality of structure*, or "the idea that rules, policies, and structures are only made 'valid' when individuals follow them

and make decisions based upon them" (Tracy, 2013, p. 59). Institutions, then, are composed of the people who act according to what the institution stands for regardless of when and where the institution physically exists:

> The reversible time of institutions is both the condition and the outcome of the practices organized in the continuity of daily life, the main substantive form of the duality of structure. It would not be true, however…to say that the routines of daily life are the 'foundation' upon which institutional forms of societal organization are built in time-space. Rather, each enters into the constitution of the other, as they both do into the constitution of the acting self. All social systems, no matter how grand or far-flung, both express and are expressed in the routines of daily social life, mediating the physical and sensory properties of the human body (Giddens, 1984, p. 36).

Thus, structuration theory makes clear that our actions within institutions carry on the ideals of those from the past while retaining and even encouraging the modification of such ideals via the rules and resources of structures. Structuration's focus on agency and the duality of structure can highlight the importance of institutional actors within and beyond the organizational system in this study's goal of defining risk and those capable of mitigating it at a higher education institution.

Prominent to structuration theory are the actors who embody the system and are referred to as stakeholders (Stoffels, 1994). Stakeholder theory is a reconceptualization of the organization that structures it as a collection of relationships rather than a single entity of for-profit shareholders (Freeman, 1984). This approach emphasizes stakeholders' values, morals, and ambitions as rational pursuits and adapts to them through decision-

making and policy. Organizational initiatives, then, “mainly originate from stakeholders’ ideas, observations, and experiences in working with clients and partners in a community…they are implicit, inductive, and less systematic and coherent in comparison with formal theories” (Chen & Turner, 2012, p. 395-396).

From a systems perspective, stakeholders—not financial profit—are the foundation of purposive behavior. No longer are input costs and output profits the simple measure for organization system success. Rather, stakeholders literally ‘hold a stake’ in the success of the organization because “the arrows between the firm and its stakeholder constituents run in both directions. All stakeholder relationships are depicted in the same size and shape and are equidistant from the "black box" of the firm in the center” (Donaldson & Preston, 1995, p. 68). Stakeholders can be labeled as primary, or those whose participation is key for organizational day-to-day activity (employees, customers, shareholders, immediate environment, other businesses, government, partners, etc), and secondary, or those whose day-to-day participation is not key for organizational survival but whose influence still matters in the long-run (society, media, etc.) (Clarkson, 1995). Stakeholders have also been defined in terms of the legitimacy and urgency with which their claims are heard and addressed by the organization (Mitchell, Agle, & Wood, 1997). There is also a risk component to defining stakeholders in this way as well. Under a risk perspective, organizations that do not meet stakeholder expectations risk harming that relationship, and, thus, the resources that organizations depend upon (Spicer, 2007). Stakeholders who have been damaged by the organization’s ignorance of their claim lose trust, or “the risks associated with the type and depth of the interdependence inherent in a given relationship” (Sheppard & Sherman, 1998, p. 422). Therefore, organizations must

identify the relationships which have the likelihood to benefit or harm them, or those "which have the highest probability of interacting with an organization or those which would have the greatest impact on, or greatest impact from, the organization's actions would be more likely to be considered stakeholders and managed accordingly" (Clarkson, 1994, p. 91). Therefore, a relational approach through stakeholder identification represents a long-term view for organizational management:

> The main task in this process is to manage and integrate the relationships and interests of shareholders, employees, customers, suppliers, communities, and other groups in a way that guarantees the long-term success of the firm. A stakeholder approach is very much concerned about active management of the business environment, relationships and the promotion of shared interests in order to develop business strategies (Fontaine, Haarman, & Schmid, 2006, p. 13).

Thus, understanding who a system's stakeholders are can provide a model for understanding what the needs and concerns are for the entire organization.

D. Boundary Spanners

Within this system of relationships, there needs to be a way to gather information vital to organizational sustainability. Clarkson (1994) believed that "the nurturing and understanding (or at least cognizance of) the numerous linkages and interactions between our organizations and the rest of reality may be the key to the 'stakeholder' concept and may obviate the need to define this term" (p. 95). That is, it is extremely important to have eyes and ears in the external environment so that organizations understand the change occurring beyond their walls. Individuals who interact beyond their organizational system, or who are 'open' to receiving inputs, act as their organizations'

boundary spanner (Thompson, 1967). Boundary spanners are a conduit between internal and external environments of relationships and information. They share information with outside agencies who in turn inform or aid them with information about trends beyond the organization's immediate environment so as to prepare them for a potential change. Sometimes referred to as a bridge or liaison, boundary spanners can be anyone in an organization from the top to the bottom of the hierarchy. At the top, organizational leaders use boundary spanning to "gather information about the 'big picture' of changes in the environment without usually knowing the fine details" (Rogers & Rogers, 1976, p. 67). At the bottom level of the organizational hierarchy, workers who deal with customers and vendors on a daily basis also act as boundary spanners because they receive information about outside perceptions of their organization's product and services. Communicating this information back to organizational leaders "can lead to appropriate organizational change" (Rogers & Rogers, 1976, p. 68).

Boundary spanners are members who conduct environmental scanning in defining risk for the organization. The concept of boundary spanning rests on resource dependency theory, which means that organizations depend heavily upon their environment for the resources needed to survive. As such, "organizations must sustain relationships with stakeholders who provide the needed resources" (Seeger et al., 2003, p. 69). Typical boundary spanning roles include higher level management who interact with government, industry, and community leaders (Graber, 1992). These interactions help define the needs, and consequently, the potential risks for organizations who do not meet them. In this way, the environment is viewed as a constraint towards organizational sustainability, and the role of the boundary spanner is to remove these barriers by

negotiating with the source of constraint (Kamps & Pólos, 1999). Interactions with customers, though, are also major forms of boundary spanning. Less so in the case of the university, of course, but clerks, secretaries, and students also do a lot of boundary spanning—perhaps at "micro" levels. A boundary spanner who practices risk collaboration within and beyond their environment "promotes diversity in stakeholders, and embraces the natural complexities that produce a more comprehensive outcome. The process brings forth goals, values, and priorities that articulate the overall purpose of the alliance" (O'Hair, Kelley, & Williams, 2011). Therefore, boundary spanners symbolize not only the networks created for risk collaboration but also the overall system purpose regarding risk.

Much focus on boundary spanning is at the top of organizations, however. These organizational leaders are "professional analysts who travel and read widely and belong to professional organizations that keep them in touch with advances in their field of expertise" (Graber, 1992, p. 195). Boundary spanners act as their organization's re-definer during change, protector from environmental turbulence, and bridge to similar organizations in times of need (Fennell & Alexander, 1987). They also act as the public representative of the organization, or its output-user interface (Shrode & Voich, 1974). That is, boundary spanners symbolize the output value of their system in the eyes of their users. Since consumers ultimately determine the value of a system's output, boundary spanners act as the cyclical turning point for organizational systems as they "perceive, define, and evaluate social-human values and political constraints in setting organizational objectives and purpose… these system boundaries represent areas of interaction, negotiation, and exchange between the organization and its environment"

(Shrode & Voich, 1974, p. 139). Knowing what boundary spanners perceive of the external environment and its potential change can lead to survival and innovation for the organization (Mull & Jordan, 2014).

As such, boundary spanners must interpret a large volume of information from a great number of stakeholders (Weerts & Sandmann, 2010). What they choose to focus on represents what the organization feels is essential to their survival (Aldrich & Herker, 1977). From a systems perspective, then, boundary spanners are primary stakeholders that attend to crucial information from "seemingly disparate groups around a common cause" (Miller, 2008, p. 357). Processing information through a boundary spanner's perspective focuses heavily on the resources that the environment can provide to ensure survival of the system. This often means that a boundary spanner must speak for several differentiations of the system that are all needing resources to thrive in their specific functions. As such, a boundary spanner must be a communicator capable of understanding both system requirements and environmental constraints that "can be seen as an important information processing mechanism in the innovation process" (Tushman, 1977, p. 603). At the same time that they are exchanging information through a common language between the system and the environment, boundary spanners are also tasked with influencing the environment for more resources. As a molder and an ambassador, boundary spanners attempt to persuade environmental resource-controllers that the system will benefit from while touting the system as a leader in its field of operation (Ancona & Caldwell, 1992). This process represents a larger understanding of one's purpose. While individuals within a specific subsystem of the overall system typically concern themselves with immediate tasks, boundary spanners must not only concern

themselves with their system's sustainability but the sustainability of the outside environment that provides vital resources for their system. Thus, "engaging a system perspective or lens forces us to think about the big-picture…the health and sustainability of the extended environment in which we do our work" (Skinner & Lawlor, 2018, p. 68). Therefore, boundary spanners must constantly be scanning the outside environment to ensure not only system capability but environmental compatibility.

Boundary spanners are crucial for organizational sustainability because their knowledge and communication skills position them to potentially see where system capability and environmental compatibility do not meet. Risks to system survival can be spotted in this way, so organizations need to identify contested issues within the public domain regarding facts, values, or policy that can affect resource attainment (Seeger et al., 2003). Identifying trends in public sentiment towards each issue and positioning the organization favorably towards it exemplifies environmental scanning, which works as the precursor to issue management (Stoffels, 1994). Scanning one's environment helps boundary spanners deal with uncertainty not because it can predict the future but because "the scanning and assessment process help us to become both better-sensitized to and better-prepared for the uncertain future" (Stoffels, 1994, p. 17). In environmental scanning and issue management, nothing is off the table (Ancona & Caldwell, 1992). Because of risk society and the interconnected nature of the public sphere, organizations now attend to externalities, or the quantification of that which we do not know. Latour (2003) described externalities as the second modernity, or a theory of social activity guided by unending information:

> Put quite simply, second modernity is first modernity plus its externalities: everything that had been externalized as irrelevant or impossible to calculate is back in – with a vengeance. This is nowhere clearer than in the ecological crisis: there is no longer any outside that can be considered as irrelevant – literally anything has to be taken into consideration (p. 37).

Often times this means that current or potential stakeholders are identified because some may be on the opposite end of the spectrum regarding a contested issue, and, thus, "if potential problems exist with a group, organizations should seek to establish some rapport" (Seeger et al., 2003, p. 68). Coombs (1999) believed that both primary and secondary stakeholders pose risks because the former hold the short-term sustainability in their hands (a labor strike, for instance) while the latter can exacerbate a scandal in one's larger environment (the media, for instance). As such, "Organization(s) should work before a crisis to cultivate strong partnerships with stakeholders" (Ulmer et al., 2011, p. 43). The boundary spanner, again, is responsible for procuring these relationships with other stakeholders of both the primary and secondary level. Having agreement between fellow system members—or primary stakeholders—is key for unifying behavior and improving performance that attracts secondary stakeholders, or support from the larger public. As such, boundary spanners are often likened as marketers of the system they represent and must present it as an attractive system that outsiders would like to enter. Boundary spanners, then, are not just knowledgeable links between system and environment but a face of concerted effort representing system vitality and pleasantry. A system needs customers, and, therefore, "an organization is dependent on 'environmental actors' (i.e., stakeholders) who control resources that are critical for its continued

survival" (Hult, 2011, p. 23). Therefore, boundary spanners must have technical knowledge, diverse communication skills, and marketability when entering the environment. The information they receive, or the energy that the environment provides for the system, must be processed with regard to this purpose. However, when a risk threatens such purpose of boundary spanners, it must be processed through the system in which they have created for its processing.

E. Organizational Learning

Organizational members—no matter what level—eventually routinize their activities in order to accomplish tasks alongside others in the organization that forms a system in and of itself. This is how organizations process information and retain it through learning, which is a "system of actions, actors, symbols, and processes that enables an organization to transform information into valued knowledge which in turn increases its long-run adaptive capacity" (Schwandt & Marquardt, 2000, p. 43). Like the duality of structure, organizational learning posits that individual members are the key to the intellectual growth and sustainability of an organization. The actions of its members in performance of organizational tasks strengthen the reasoning behind the task. When the task is challenged or becomes ineffective, members perform in a different way and eventually help the organization 'learn' how to overcome challenges. Thus, performing and learning from that performance "allow the organization to change and adapt to its environment" (Schwandt & Marquardt, p. 58).

There are three key assumptions that undergird organizational learning. First, organizations are governed by behavior that has become routinized. That is, much like structuration's notion of rules and resources, organizational members learn how to

complete daily tasks by embodying the norms, the language, the power, and the access that other members embody in completing their tasks. Tasks are eventually not questioned, then, because members have learned through organizational structure which spans time and space and has been handed-down from other members (Giddens, 1984). Secondly, organizations are history-dependent. They justify their existence and routines through the past "more than anticipations of the future" (Levitt & March, 1996, p. 517). Routines in the form of policies and procedures become concretized over the years. There is also a historical significance concretized through communication, too. The stories and the interpretation that organizations tell from their past all signify the way in which members should view the organization, how it overcame challenges, and how current situations can be handled. Lastly, organizations are geared to learn from the outcomes of their targets. Much like individuals, organizational "behavior depends on the relation between the outcomes they observe and the aspirations they have for those outcomes" (Levitt & March, 1996, p. 517). Thus, sustainable organizations learn by doing routines and telling stories that give them positive outcomes. This process also creates an organizational memory that higher level members use to indoctrinate new members with in order to continue operations (Walsh & Ungson, 1991).

However, organizational learning assumes that there is an occasion to learn because there has been some sort of interruption in the system. When organizations fix that cog with its standard rules and resource structures, they operate through first-loop learning. When the task continues to falter, organizations need to think about how they approach the task as a whole, or how the rules and resources structure the task at hand. This is a second-loop, or a 'learning about learning' that alters the nature in which

organizational actors approach the system (Tracy, 2013). What happens, though, when organizations become so routinized that learning does not occur because there appears to be no interruption? Organizations that rely on continual methods of operations without questioning second-loop learning create a path dependency. Path dependence is a "deliberate attempt to launch a self-reinforcing process that stabilizes values" (Blombäck, Brunninge, & Melander, 2013). That is, in times of interruption, organizations often need leadership to communicate resolve and a path forward. Value statements are such paths that operate like signifying rules for dealing with interruptions to the system. Continual routines in organizations—including communication—can create a "deliberate management of meaning…such initiatives may be launched by managers when they perceive a need to introduce, clarify, change, or strengthen the values prevailing in a company" (Blombäck et al., 2013, p. 166-167). Path dependence works in three phrases (Berthod & Sydow, 2013). First, a signal in the environment triggers the need for a self-reinforcing reaction, or a survival-response, from the system. The system then looks for a self-reinforcing mechanism, or a response-leader, to make a decision regarding the trigger's entry into the system. Once a response is chosen, the system 'locks-in' and becomes deterministic in future responses to similar triggers. Path dependent communication—like the rules and resources learned in organizational structures—become sediment in organizational life "reinforcing the 'taken-for-grantedness' of the practice among actors" (Berthod & Sydow, 2013, p. 207). Thus, communication of important signifying rules can inform how organizations view interruptions, threats, and potential risks through a readymade response learned from a continually running system governed by its prominent boundary spanners.

F. Sensemaking

Sensemaking provides an interpretation of a situation when none exists. Sensemaking is counterintuitive to rational models of decision making that assume behavior is a consequence of deliberate intentions. As Tracy (2013) described, sensemaking happens retrospectively by taking into account the actions which led to specific occurrences that "contrasts with cognitive approaches, which suggest that thinking precedes external talk and action" (p. 58). Sensemaking, then, is analyzing a lived experience, which "is stated in the past tense to capture the reality that people can know what they are doing only after they have done it" (Weick, 1995, p. 24). *Enactment* is the first stage in which organizational leaders choose some environmental stimuli that may be seen as affecting the system. It is an action directed towards understanding previous events that creates enactment because "when people act, they bring events and structures into existence and set them in motion" (Weick, 1988, p. 306). Enactment is a voluntary action that has implications for the situations it highlights as relevant to a current decision. This can also neglect other possible meanings, as Turner (1976) classically described:

> The central difficulty, therefore, lies in discovering which aspects of the current set of problems facing an organization are prudent to ignore and which should be attended to, and how an acceptable level of safety can be established as a criterion in carrying out this exercise (p. 379).

Enactment, then, frames what the organization should direct its attention towards. The second stage of sensemaking interprets the information chosen through *selection*. Organizations can interpret this information in many different ways, but ultimately one

interpretation will become dominant. Unfortunately, organizations tend to select interpretations that reduce their legal liability through evading responsibility and maintaining a positive public image (Seeger et al., 2003). For example, the public crisis that enveloped drivers of Ford Explorers with Firestone tires in the 1990s produced multiple interpretations that blamed one another and the National Highway Traffic Safety Administration (NHTSA). Sensemaking, as a retrospective method, however, allows organizations to rewrite the narrative on crisis (Venette, Sellnow, & Lang, 2003). Analyzing how organizations select to interpret the cause of a crisis implicitly reveals how they want others to interpret it as well. Sometimes, organizations select a risk information piece which appeared to be unknowable or unstoppable prior to the crisis, and they are then "asking the audience to view the story from a different (albeit more favorable) perspective. The shift in viewpoint necessarily changes the way an audience is asked to understand the crisis" (Venette et al., 2003, p. 232). Therefore, the selection process of sensemaking is as much an organizational initiative as it is a social action predicated upon audience acceptance.

Retention is the third process in sensemaking, and it employs rhetorical responses as well as organizational policies and routines which ensure detection and elimination of enacted risks (Seeger et al., 2003). To get to a stage of retention, organizations make sense of past events by creating contingency plans for crisis "types," such as evacuations for natural disasters or procedures during an active shooter event, and narratives as to how they overcame past crises (Payne, 1989). This stage represents a metaperspective of how organizations define reality and what they consider as relevant knowledge to that reality (Jackson & Cornell, 2013). Thus, dealing with crises is a comprehensive

organizational endeavor that leaves its mark through a retention of policies that identify risks and the ways in which they should be handled. It is "through this process of sharing [that] the organizational interpretation system in part transcends the individual level" (Walsh, & Ungson, 1991, p. 61). Organizations, therefore, create their own memory by sensemaking routines of social construction that specifically deal with past, current, and future risks (Kramer, 2004).

Another fitting example of both sensemaking and uncertainty reduction at play is Gigliotti's (2016) interpretive look at university presidents during times of crisis. Despite the idyllic picture that schools want to portray to the public about their own safety, "in unfortunate yet ever-increasing circumstances…institutions become scenes of sadness, terror, and uncertainty. From campus massacres and student suicides to faculty dismissals and student protests, these moments of 'crisis' both create and demand opportunities for sensemaking" (Gigliotti, 2016, p. 185). Uncertainty and sensemaking go hand-in-hand in two ways. First, post-crisis sensemaking reveals that presidents' must recognize that crises do not unfold the way a contingency plan might indicate. "Crises, by their very nature, force leaders to act first and think second" (Gigliotti, 2016, p. 191). Making sense of their actions, however, is where uncertainty becomes enacted. A popular enactment among presidents was the uncertainty around labeling what specifically the crisis was because often times the "the perception of crisis by others is as important symbolically as the crisis itself" (Gigliotti, 2016, p. 187). Therefore presidents selected which role response—leader as a comforter, caretaker, or 'man of steel'—provided successful guidance through the uncertainty of a crisis situation. In the future, this role is retained for dealing with similar risks (Gigliotti, 2016).

For Weick (1995), the sensemaking process is itself a cyclical system of learning that reproduces itself anytime there is an interruption of the normal. This is especially true of complex and large organizations that have concertized routine over the years to run as efficiently as possible. Such a process is crucial for large collectives to learn and "suggests that sensemaking will be more or less of an issue in organizations, depending upon the adequacy of the scripts, routines, and recipes already in place" (Weick, 1995, p. 5). Moreover, the current study asks specifically as to what the interruptions—risks—are that may cause for an occasion of a system's main components (boundary spanners) to engage in some sort of decision making and communication process. With such a large degree of responsibility and expectations from the system, boundary spanners offer a unique view into how an organization's main components react toward potential risks in the larger environment. Such a question also intrigued Weick (1995):

> Organizations depicted as open systems should be most concerned with sensemaking…greater openness to input from the environment means they have more diverse information to deal with and from the fact that their looser system structure means that the entity doing the sensemaking is itself something of a puzzle (p. 70).

Therefore, as highly competent ambassadors charged with procuring resources for the university, a look into how each deals with potential risk could shed light on processes of information gathering and response with regard to organizational practices. By first investigating how boundary spanners react to risk, a larger system of risk processing can potentially be seen in organizational decision making. First, then, as noted earlier, was asked:

RQ1: How do campus leaders perceive and communicate risk within the university system?

And then, second, was asked:

RQ2: How do university leaders process risk information as part of an organization?

CHAPTER III - METHODS

The two overarching research questions address the need to not only define risk at a higher education institution but also seek to identify what organization theory might best describe these practices. Since research is scattered in the field of risk communication from an organization theory perspective in higher education, a case study is warranted to gain in-depth knowledge of habits, rules, practices, and insights from its experienced administrative leaders. However, before detailing the appropriateness of the case study method for the current study, a brief background on the issues, concerns, and vulnerabilities from both natural and manmade perspectives will help shape risk as an object of study needed for further investigation.

A. Background on Risks in Higher Education

Higher education systems, in some regards, are not unlike other organizations in terms of risk. Natural disasters such as tornadoes and hurricanes can ravage campus structures regardless of regional location. As such, an important first step in mitigating potential crisis from natural disasters is to train employees and students on preventive procedures such as protecting one's self and property (Booker Jr., 2014). Unfortunately, higher education can also relate to the world of random violence seen in mass shootings that strike without a moment's notice in organizational structures, including churches, shopping malls, grocers, movie theaters, indoor and outdoor concert venues, bars and restaurants, primary education systems at all levels, and varying workplaces in general. In response, higher education officials tasked with protecting the campus have increased active shooter education (Hamilton, 2014). Increased awareness on these and other risks have mirrored the Federal Emergency Management Agency (FEMA) and U.S. Homeland

Security's call to create a culture of preparedness. According to Zdzarski (2016), of the five phases of modern crisis management theory—prevention, protection, mitigation, response, and recovery—only response and recovery are taken seriously by organizations. That is, organizations often focus on the crisis and its aftermath rather than preparing with all its resources for the challenges that may one day emerge:

> Well-prepared organizations understand that crisis management is an ongoing process in which organizational leaders constantly scan the environment for potential threats and risks, take actions to address the causes of a crisis event, and thereby attempt to avert or reduce the likelihood that such an event might occur (Zdzarski, 2016, p. 27).

Therefore, higher education institutions are similar to other organizations in that their sustainability depends upon crisis preparedness that seeks to identify and mitigate risks through a continually proactive rather than reactive approach from leadership.

Although universities are increasingly aware of their physical vulnerability, less is certain in terms of the university's social, cultural, and political sustainability. In terms of the university's position in society, it is important to understand the historical patterns with which the university has been viewed. Although this study is not meant to provide a detailed description of the university both past and present, it is necessary to understand the general standing that higher education has occupied in society, and, particularly, American society.

The university held a politically protected ground in the Middle Ages as religious officials used it as the legitimate training site for the unchanging classics of the academy: Law, Greek and Roman tradition, Logic, and Theology. Since religious authorities treated

the university as a safe haven where "knowledge" was stored, the public followed and did not much criticize the institution (Goodchild & Wechsler, 1997). Soon, though, religious structures would be undermined by the likes of Martin Luther and The Enlightenment where institutional authority was not only challenged but its dogmatic ideology rejected. Thus, higher education had to change to address the utility of teaching dying arts and impractical logic in an age where people began to question institutions (Hogarth, 1957).

The German system of higher education soon responded to the demand of practicality by encouraging and promoting the applied research of its faculty members. Higher education was beginning to transform under this new model that treated the university as a harbinger for understanding and training during modernization and technological advances that provided employment and a higher quality of living for the masses (Goodchild & Wechsler, 1997). The American system—once similar to European models that saw the prestigious Ivy League schools teaching only outdated and precarious subjects irrelevant to the modern workforce (Hofstadter & Hardy, 1952)—soon followed suit with the help of the political system that funded land grant institutions to help cultivate more efficient and productive outputs in areas such as agriculture, engineering, and manufacturing (Goodchild & Wechsler, 1997). With increased enrollment, a recognized relevance in economics, and a political backing, the university felt confident in its role as a trainer of young men and women for the leadership of tomorrow (Hofstadter & Hardy, 1952).

However, while this moment was crucial in understanding the role that higher education plays in training a workforce, it is also a reminder of the constraints that inevitably challenge its position in society. Soon, through the GI Bill and other increased

federal and state funding programs, higher education exploded to include a majority of the population that some felt were not interested or qualified to attend the university (Hogarth, 1957). At the same time, the university's offerings were a confusing mix of subjects with differing purposes that could range from cataloging Roman poetry before Christ to training the local farmer in new fertilization practices (Hofstadter & Hardy, 1952). While this versatility is seen by some as a strength, it can confuse the general public which expects clear goals and outcomes from organizations which provide goods and services (Losco & Fife, 2000). Thus, the historical background of higher education provides a recurring tension between those who see it as a training ground for the practices of the contemporary workforce and those who see it as an important vanguard of educating the public in the importance of the humanities, sociocultural relations, and democratic leadership qualities cultivated and forged through history (McMurrin, 1976).

In a similar fashion, funding for higher education has also become contested. Higher education used to enjoy substantial federal budgetary provisions until the 1990s in America (Lovell, 2000). At that time, however, a fiscally conservative legislature began to shift the burden of funding higher education onto the state legislatures through block grants that could be used for whatever the state pleases. Since higher education—unlike K-12—is not constitutionally (and, therefore, financially) protected, it becomes a major issue between university administrators and state politicians when the budget is announced. While Medicaid and K-12 require some mandatory funding, other programs such as higher education have to fight with the correctional industry and the welfare system for funds. "Which should receive the largest share of the state budget is a question often debated in capitol rotundas around the country…higher education is often perceived

as the budget balancer as it is not a state or federally mandated program" (Lovell, 2000, p. 112). Additionally, the strain that the economic recession of 2008-2009 placed upon public higher education systems included the loss of state funds and scholarships to entice students (Barr & McClellan, 2011). Although the recession caused many Americans to go back to school for training purposes, some were backed by federal government loan programs as students tended to look for cheaper options such as community colleges and trade schools. At the same time, other state-funded institutions such as infrastructure, health, and public safety increased monetary requests that challenged higher education's legitimacy in receiving large shares of public funding:

> The result has been less and less direct fiscal support for public higher education and increased expectations that such institutions develop new ways to obtain the resources necessary to operate the enterprise. In fact, some public institutions have changed their public rhetoric and describe their institution as state "related" rather than state "supported" because the contribution of the state to the institutional budget has been reduced so much over the last decade of the twentieth century and the first decade of the twenty-first century (Barr & McClellan, 2011, p. 4).

This would explain public institutions that also have a "foundation" aimed at raising funds through private donations, increased spending on athletics so as to attract more students, and, of course, relying on students to pay tuition fees which used to be funded through the federal and state levels. In the United States, the average amount spent on a year of a college education is $30,000, or more than double other developed countries (Ripley, 2018). Since local funding sources have all but dried up, local students can no

longer procure state funding for the school. Universities seek more out-of-state and foreign students because they can charge a higher price. Therefore, public institutions are run more like businesses that don't search for the best but the "richer students…State cutbacks did not necessarily make colleges more efficient, which was the hope; they made colleges more entrepreneurial" (Ripley, 2018, para. 13).

Furthermore, higher education systems are also challenged in defining their audience. According to Ridner (2017), traditional students—directly out of high school, aided by scholarship and/or parental funding, and free to use their time as they please—are increasingly replaced with an older demographic that works, has children, and is not physically close to the university. "Nontraditional students are the new normal, they deal with a higher ed system that does not take their scheduling needs into consideration" (Ridner, 2017, p. 64). As a result, universities are now transitioning to more online offerings in an attempt to appeal to a new demographic.

A stereotypical view of the typical higher education environment also does not help in protecting its image in the eyes of the public. As discussed earlier, the "safe space" issue paints the picture of an overly sensitive, politically correct culture that has gone overboard in censoring and altogether eliminating differing viewpoints. This is all done in the name of 'inclusion' as universities push to embrace historically underrepresented minorities. However, this often rears its head through media coverage of the sensational, such as the attempt to decline a moment of silence in 2015 for 9/11 victims from the student government at The University of Minnesota because there weren't similar moments of silence for nonwhite victims. Another incident included the student outrage after Amherst College posted 1st amendment reminders around campus

"In memoriam of the true victim of the (University of) Missouri protests." Lastly, a recent firing of a popular Yale lecturer because she reminded students that spending one's time avoiding offending somebody defeats the purpose of learning crystallized national attention (Lane, 2016). With students increasingly driving what is acceptable and unacceptable in campus discourse, "Who is left to decide which beliefs are permitted and which concepts—or people—are discarded?" (Lane, 2016, p. 3). As a result, college campuses have become a hotbed for outside influences about the importance of *having* outside influences on campus. Because of the negative attention that controversial speakers bring to campus and the tragedy that erupted in Charlottesville from an alt-right rally the prior day at the University of Virginia, campus administrators have taken measures to mitigate the effects of controversial speakers and events. Some of these protective actions include requiring speakers to be invited from a student organization, limiting public events to certain spaces on campus, and requiring several days to week(s) notice of an intended event (Bauer-Wolf, 2018). As long as universities ensure that speakers are not barred because of their political views, higher education systems can still uphold 1st amendment rights with limits because they "are now looking at ways to restrict certain events, but to avoid doing so based on content" (Bauer-Wolf, 2018, para. 1).

Thus, the political and sociocultural issues that surround higher education threaten its prominent stature in society. As funds are increasingly cut from federal and state aid, universities are forced to depend more and more upon private donations and student tuition fees. The effect of this is an opening question of the true value of higher education that is exacerbated by public perception that the output of such systems are liberal snowflakes afraid of opposing viewpoints (Tillett, 2018). So while higher education

systems attempt to protect themselves from natural and manmade risks like other organizations, they also occupy an economic, intellectual, and civic space with risks unique in and of itself. Such a characterization is an appropriate rationale for a deeper look through the case study approach that builds the object of risk at a higher education system through the communication of its most experienced leaders.

B. Case Study Approach

Case study research typically targets a specific individual or group as a single entry point into an area of social life of which little is known or theorized. For this reason, case studies usually refrain from control or experimental designs. Instead, they provide low constraints with regard to participant procedures so as to illuminate a naturalistic, system-like process of the 'how' and 'why' of communication (Patton, 1990). That is, case studies display both how communication functions to create meaning and why it is successful or unsuccessful in a given case. Simply put, case studies "comprehensively describe and explain the variety of components in a given social situation" (Arneson, 1993, p. 164).

Case studies are typically composed with regards to individuals (psychological or medical profiles) or groups (organizational or governmental operations). The former refer to clinical assessments while the latter compose sociological assessments of interaction from a single or monographic perspective (Hamel, Dufour, & Fortin, 1993). Case studies of the latter are historically linked to ethnography because the selection of an insulated research location, like a tribe or culture, limits outside influence on participants. However, as Hamel et al. (1993) explained, with the advent of modernity and an increasingly technologized society, "it would be hard to claim that a culture or a society

could be fully studied using the physical and geographic framework of the village alone" (p. 5).

Therefore, a major impetus in case study research in America came from the Chicago School of Sociology during the 1920s and 30s. Researchers sought to explain rapid urbanization and its effects on social structures through methods other than those performed in laboratory settings. This meant that researchers had to go into the field and build a 'case' through interviews, observations, and analyzation of social documents, such as newspaper articles, statistical reports, legal decisions, and personal diaries. Bringing in different data types meant a change in explanatory philosophy, more importantly. It viewed the case study from a constructionist perspective, or one that explains a social situation's state not as predetermined but one which is shaped by the meanings that arise from interaction among social actors. In this sense, research within the social sciences and, specifically, case studies, must determine how people treat objects, which are

> an experience containing the meanings and symbols involved in the interaction of the social actors…The sociological study, within the context of the symbolic interactionism favored by George H. Mead, and, particularly, the case study, must thus consider the perspective of the social actors. This direct experience is what constitutes the object under study (Hamel et al., 1993, p. 17).

Arneson (1993) likened the case study of objects to the concept of social awareness, which is communication during a situation that creates, interprets, and recreates meanings of objects. Thus, the study of an object is "best gauged by its usefulness or the merit it holds in explaining the way humans communicate" (Arneson, 1993, p. 160).

According to Lee (1999), there are five components to a case study. If these are executed properly, case studies create singularity, or the transformation of a local object to a global representation (Hamel et al., 1993). Case study components include formulating a research question, introducing theoretical propositions, identifying units of analysis from the propositions, providing logic that links data to the propositions, and illustrating criteria of proposition evaluation (Lee, 1999). If these steps sound familiar to the scientific method, it's because they are. Where they are different, however, is in their representativeness of the object. The case study deals with objects which are socially constructed. Case studies do not explore causal relationships between controlled variables that are defined independently of the researcher prior to the study. Rather, case studies operate through qualitative contingency, or bringing order to "a level beyond that of the raw case data" (Patton, 1990, p. 387).

Therefore, a researcher must first define the object, identify an ideal vantage point from which to observe it, and conduct an analysis which merges participants' construction of the object with theoretical language of sociology (Hamel et al., 1993). Such a process transcends the object and the case beyond common sense or intuition. This means that the entirety of the project is facilitated through a rich description of an object becoming real to social actors. "In this sense, the depth of the description of the case study naturally provides this demonstration, because it facilitates a clear understanding of what the object of study refers to in the materials" (Hamel et al., 1993, p. 46). Ultimately, this means that case studies explain the social through the social. In other words, the experiences of social actors illustrate not only the meaning of an object but the relationships which make the object possible.

Once data are collected through singular or various methods of the case study, there are two general forms of analysis. The first is a testing of the theory which informed the study. Such an approach is not unique but classic to analytic logic because "the original objectives and design of the case study presumably were based on such propositions, which in turn reflected a set of research questions, reviews of the literature, and new insights" (Yin, 1989, p. 106). The second form of analysis rests in cases in which there is no proposition or theoretical frame. These are typically found in ethnographic or anthropological interests of cultures of which researchers know little. For the present study, the former more appropriately applies because a wide range of risk, communication, and organization theory has been structured into the questions.

Case study analysis operates through both pattern matching and explanation building. Pattern matching simply analyzes data through a mapping of relationships between social actors and their objects. The patterns of interaction that emerge are then compared to theoretical propositions to identify commonalities. "If the patterns coincide, the results can help a case study to strengthen its internal validity" (Yin, 1989, p. 109). Explanation building, however, still focuses on matching theoretical propositions of research goals but does so from an iterative approach. That is, propositions are refined as data is analyzed and, if necessary, data is looked over again to ensure its fit to revised propositions. "The gradual building of an explanation is similar to the process of refining a set of ideas, in which an important aspect is to entertain other plausible or rival explanations" (Yin, 1989, p. 115).

C. Case Study Design for a Higher Education Institution

The purpose of a case study research design is to get from 'here' to 'there,' or a sequence that starts with questions and ends with conclusions. This is accomplished through identifying the empirical field, systematizing data collection processes, and analyzing data. The empirical field covers both the selection of a site and unit of analysis. For the current study, the site is a higher education institution and the unit of analysis is its administrative leaders.

Next, data collection processes must be systematized in that for each instance of investigation the unit of analysis is treated the same. This means that a researcher should follow a protocol of uniform procedures to ensure reliability (Yin, 1998). Meeting informants in similar places, asking the same questions, probing in the same manner, and ensuring anonymity of answers is paramount. All but three one-on-one interviews took place in informant's offices for this case study (two came via email and one was conducted over the phone), and all participants were asked the same questions (see Appendix A). Follow up during the interview process came each and every time an informant indicated a risk that involved communication with others on campus. Once the researcher felt study objectives and research questions were addressed on that example, the next question was asked. Additionally, all recorded interviews were immediately transferred from the recording device to a flash drive that stayed locked in the researcher's apartment. The recorded files were then deleted from the recorder because it typically traveled with the researcher and therefore contained a security risk of exposure. Lastly, an informant table (see Appendix B) of immediate impressions post-interview provided a reflection on research objectives, surprises, difficulties, and progress made

(Guest, MacQueen, & Namey, 2012). This included details of triangulation of previously discussed risks, discrepancies between informants, and overall connection of responses to research goals.

D. Participants

Qualitative research requires the researcher to provide meaning construction from the point of view of the participant. This means that researchers must choose participants who have a direct working relationship with the object of study. For Stake (2010), this is where participants become known as informants. While participants, for example, would be appropriate for a survey, an informant would be more appropriate for social knowledge of a scene. For qualitative researchers, the conditions of the social world are what they want to immerse themselves in so as to understand meaning that arises within them. Thus, a participant provides objective, scientific knowledge but an informant provides subjective, professional knowledge that "depends on the experience of the researcher, the experience of those being studied, and the experience of those to whom information will need to be conveyed. Professional knowledge relies heavily on personal experience, often in an organizational setting" (Stake, 2010, p. 14). Informants with professional knowledge in organizations are "experienced and savvy in the scene, can articulate stories and explanations that others would not, and are especially friendly and open to providing information" (Tracy, 2013, p. 140). This last part was treated very carefully with a study on risk. Despite receiving a "Review Not Needed" from the Institutional Review Board, it was recommended to speak with the university's Office of General Counsel so as to provide further assurance of research ethics and confidentiality. Additionally, recruiting materials such as emails and face-to-face introductions with

potential informants stressed not only the anonymity of the school and the informant (only their position at the school would be named) but also the practice of member-checking to insure accurate quotations and themes generated from them. Despite previous warnings about the possibility of struggling to recruit informants, only two individuals declined. In fact, a majority of informants were candid, talked in detail about risk situations and experiences, and pointed to others within the system for the researcher to follow up. Informed consent materials were still given and signed by all 30 informants ensuring them their data would be protected, their identity not revealed, and their recordings be destroyed once the final report was released.

A variety of voices from university leadership in the areas of academic affairs, student affairs, human resources, housing, physical maintenance, university police, the health center, community relations, liability and compliance, athletics, and communications helped create an ideal place to start in identifying risk and its organizational outlook at the university. This variety of voices provided credibility to a qualitative study "rather than relying on just a few to speak for the entire culture" (Tracy, 2013, p. 140-141). The following table (1.1) indicates informants who participated in the study as well as their corresponding department/division at the university:

Table 1 *1.1 Informants and Corresponding Department/Division*

Informant	**Department/Division**
Major of Operations for the University Police Department	*Student Affairs*
Assistant Chief of Police for the University Police Department	*Student Affairs*
Executive Director Health Services	*Student Affairs*
Assistant Director Health Services	*Student Affairs*
Chief Communication Officer	*Office of The President*
Assistant Director of Communications	*Satellite Campus*
Provost and Senior Vice President of Academic Affairs	*Executive Cabinet*
Dean of the Graduate School	*Academic Affairs*
Director of Graduate School Operations & Recruitment	*Academic Affairs*
Vice President for External Affairs	*Executive Cabinet*
Vice President for Student Affairs	*Executive Cabinet*
Director of Intercollegiate Athletics	*Executive Cabinet*
Director of Compliance and Ethics	*Office of General Counsel*
Title IX Coordinator	*Office of General Counsel*
Assistant Vice President for Student Affairs	*Student Affairs*
Director of The Center for Community Engagement	*Student Affairs*
Director of the Physical Plant	*Finance and Administration*
Assistant Vice President for Enrollment & Dean of Admissions	*Admissions*
Director of Admissions & Recruitment	*Admissions*
Administrative Specialist for the School of Social Science and Global Studies	*Academic Affairs*
President of Student Government Association	*Student Affairs*
Vice President of Student Government Association	*Student Affairs*
Director of The Office of Leadership and Student Involvement	*Student Affairs*
Executive Director of The Alumni Association	*External Affairs*
Associate Director of The Center for Faculty Development	*Academic Affairs*
Vice President of a Satellite Campus	*Executive Cabinet*
University President	*Executive Cabinet*
Executive Director of Housing & Residence Life	*Student Affairs*
Associate Vice President for Human Resources	*Finance and Administration*
Vice President of Finance and Administration	*Finance and Administration*

E. Analysis

Informant data from one-on-one interviews were transcribed word-for-word at the end of data collection in order to conduct a thematic analysis. The software transcription website Transcribe Wreally created 386 double-spaced pages for the 30 interviews. With such a large amount of data, applied thematic analysis (ATA) helped reduce the amount to chunks segmented in responses to general topics in the study. For example, the first question asked about an informant's purpose at the university, the second asked about a risk to that purpose, the third asked who would help with its mitigation, the fourth asked how to deal with uncertainty, and the fifth asked what type of risk is most worrisome. These five categories of responses allowed for an overall process of decision making and action with regard to risk without imposing a specific theory upon informants to respond. By segmenting data into these chunks, coding could also be simplified through an incident to incident approach (Charmaz, 2006) that compares informants' actions of routine operations rather than line-by-line coding. By separating each informant with an overall incident of risk and its components, comparing them becomes easier by recognizing similarities as well as dissimilarities.

Initial coding began for each structured question by remaining as close to the data's action as possible (Tracy, 2013. That is, initial coding seeks to categorize data by similar words, actions, phrases, metaphors, and events which can prevent a researcher's tendency to analyze before all data has been coded. "This method of coding curbs our tendencies to make conceptual leaps and to adopt extant theories before we have done the necessary analytic work" (Charmaz, 2006, p. 48). For example, the question regarding purpose produced action frequencies of 'adapt' and 'lead,' the question regarding risk

produced ‘damage’ and ‘consequence’, mitigation produced more action like ‘learning’ and ‘collaborating’, and risk type produced frequencies of ‘political’ and ‘culture.’ This still tells little about the data, though. Initial coding needs to have an action followed by a gerund to indicate what specifically the informant meant by the action. So ‘adapt’ became ‘adapt to a different educational climate’, ‘consequence’ became ‘a consequence leaning in the wrong direction,’ ‘collaborating’ became ‘collaborating with like-minded professionals’, and ‘political’ became ‘political decision regarding funding.’ This helps the researcher gain perspective of the informant by “preserving the fluidity of their experience and gives you new ways of looking at it” (Charmaz, 2006, p. 49).

Next, focused coding condensed initial codes into conceptual language that focused more on building theoretical propositions. By providing the beginnings of a theoretical framework, focused coding still allows for a constant comparative method that tests a theory’s propositions against emergent codes (Charmaz, 2006). Theoretical constructs allows the researcher to move quickly across data because initial coding provided the actions, experiences, and meaning of informants in shorthand. For example, the coding of purpose provided the settings and actions of purpose but did not adequately describe the meaning of purpose across all informants. However, when looked at through responses to risk and risk type, purpose became synonymous with a collective awareness needing to adapt to an unwelcoming environment. Similarly, coding regarding stakeholders and mitigation was rather bland because it routinely named the same people. However, when combined with questions of uncertainty, suddenly informants chose to figuratively step beyond campus walls to indicate the outside resources and relationships they regularly call upon in such times of need. In this way, focused coding displays the

connective tissue between categories and “moves your analytic story in a theoretical direction” (Charmaz, 2006, p. 63). By providing the connection between codes, patterns emerge that can then be used to either build theory or compare findings to current theoretical propositions (Creswell, 1994).

F. Codebook Development

The theory that broadly defined the interview guide and structured questioning was a general systems framework. After focused coding revealed a system at play, specific concepts of a general systems theory and its subsequent theoretical developments were employed through an iterative approach to go back through the data and recode within those theoretical constructs. This method towards analyzing data resides between an emic, or an emergent understanding of responses, and an etic, or established understanding of data through existing theory. “Rather than grounding the meaning solely in the emergent data, an iterative approach also encourages reflection upon the active interests, current literature, granted priorities, and various theories the researcher brings to the data” (Tracy, 2013, p. 184). For example, answers with regard to purpose not only mentioned departmental but university purpose. Codes of ‘lead,’ ‘adapt,’ and ‘relevant’ indicated a systemic approach for the university in its specific purpose, and subsequent answers in that question response became codes for purpose. Similarly, risk answers emerged through a largely qualitative and subjective value that rarely, if at all, mentioned probability estimates. Therefore, focused coding was followed by a theoretical imposing of ‘political,’ ‘social,’ and ‘cultural’ voices that shaped subsequent recoding of risk through further description of each code (subthemes). Lastly, focused coding revealed the extent to which university leaders were stepping beyond organizational walls to solve risk

issues. This process indicated a role of boundary spanning, and subsequent coding imposed both the resource procurement measures (money and knowledge) and the adaptive communication measures (positivity and optimism) upon informants' behavior when indicating a boundary spanning action. Codebook labels, definitions, and examples are located in Appendix D. A shorthand guide is illustrated in table 1.2 below:

Table 2 *1.2 Shorthand Codebook Guide*

Theme	**Codes**	**Examples**
Purpose	Adapt, lead, relevant, change, keep-up, modify	"Our job is to provide the most efficient and relevant educational experience there is out there."
Risk	Consequence, loss, falling behind, ill-prepared, unexpected, misperception	"There's always risk in not connecting with the community who can support you."
Collaboration	Problem solving, conference travel, enlisting aid, directing staff	"We need to make sure every interaction—no matter who it is with—is a positive one."

G. Validity Checks

The informant table reflected triangulation within interviews, verification on quotes, and context attributed to informants prior to releasing a final report (see Appendix C). These measures ensure internal validity by providing insider approval that data, codes, and themes are trustworthy and accurate because they have met both informants' acceptance and researchers' interpretation (Creswell, 1994). Two additional data coders were also enlisted for external validity measures. Since coding had followed an iterative

approach that imposed theoretical constructs after focused coding, outside coders operated as a check on the principal investigator's assignment of existing constructs explained in the codebook. Both coders reviewed the codebook's labels and definitions before being assigned the same 35 pages of text picked through an online random number generator. Once all text was coded, all coders got together in order to reach a subjective assessment of data, which simply entails that "each time the coders reach a point where their coding does not agree, they discuss the reasons for the discrepancy, agree on a solution, recode the master coding document, and revise code definitions if necessary" (MacQueen & Namey, 2012, p. 89). For example, disagreement on the application of 'stakeholders' came up frequently as its application became entangled with purpose. As such, we reached an agreement to make a more explicit code that placed stakeholders under boundary spanning efforts which separated it from a construct like purpose. An example of the finished codebook employed after intercoder agreement was reached can be found in Appendix D. A code label starts the process of coding for the coder by indicating a single word that helps distinguish codes from one another. A short code definition helps theme recognition because it is a phrase that captures the basis of the theme the code is meant to represent, while a long code definition is a short paragraph that describes the theoretical implications the code represents. A theme is a phrase or sentence that identifies what a unit of data is about or means and is described by abstract concepts that link not only expressions in the text but also images, sounds, and objects (Guest et al., 2012). Lastly, when to use a code explicitly states the textual clues and context in which the code would appear, and, conversely when not to use a code would

explicitly state the text and context that may overlap with the code in which case suggestions are given as to other codes that may be more appropriate.

Interviewing took place predominantly in informants' offices. Each interview was voice recorded on site and transcribed within two days of the interview. A participant table detailing initial reactions regarding potential themes (Ryan & Bernard, 2003) was filled out after each interview and also password locked on a flash drive. Coding took place after transcription and continued in the constant comparative method until all interviews were completed and coded. Themes became saturated after focused coding continually showed the same pattern which gives the researcher confidence of a theoretical match (Creswell, 1994). Subthemes were constantly compared against larger structural themes to ensure their fit. This means that subthemes helped construct a larger theme by building its propositions through an actor's interpretation of action (Charmaz, 2006). For example, 'adapt' and 'learn' are important subthemes of a larger theme because they alone do not tell the story of dealing with risk as an organizational unit. Similarly, political, social, and cultural factors of perception are just one thread of a larger distinction of risk. Lastly, 'internal' and 'external' mitigation codes gave specific action with regard to risk but did not identify a universal approach until the two were thought of as one larger theme. Thus, after reading over the data multiple times, the same pattern displayed a flow of three main themes discussed in the following results section of risk perception at the university.

CHAPTER IV - RESULTS

Overall, three main themes emerged answering the two research questions. This chapter will summarize these and provide examples of each in order to highlight study findings and insights into risk at a 21st century public institution of higher education. Two themes emerged from the first research question. The first theme, known as system purpose, described informant focus regarding risk as that of needing to adapt in order for the entire university to survive an uncertain future. The second main theme to emerge from the first research question was human risk, or the communication of political, social, and cultural factors that far outweighed discussion of natural risk elements like natural disasters that could endanger the university. Regarding the second research question, a theme of collaboration emerged that described relationship building, information sharing, and joint communication expressions from risk partners within and beyond the campus boundaries that worked to mitigate unique and common risk issues for stakeholders of the university system. Below is a detailed summary of all three themes including two tables indicating informant data relevant to emergent themes.

Perceiving and Communicating Risk

The first research question sought to address the manner in which campus leaders defined and communicated about risk at a public university. Through a structured interview approach, two main themes emerged that characterized risk identification. Specifically, themes of *system purpose* and *human risk* described a risk climate within a 21st century public university. Informants typically described purpose in terms of their departmental or divisional duties within the university. However, couched within or in addition to these duties were statements regarding the overall purpose of the university.

Therefore, the theme of system purpose represents a combination of performing immediate duties relevant to the position while at the same time recognizing the importance of avoiding risk by adapting to a changing environment in order to position the university as a sustainable, relevant, and profitable system for the future.

System Purpose

Depending upon the type of department or division, to some degree informants delivered expected answers about their purpose at the university: the Provost manages curriculum development and assessment, the Undergraduate Admissions Director works to attract prospective students, the Executive Director of the Alumni Association keeps graduates connected to the school, the Student Government Association President gives students a voice in the administrative and legislative activity at the school, the Director of the Center for Faculty Development and Academic Integrity educates students and faculty on the importance of upholding academic standards, the Executive Director of Housing and Residence Life provides safe living quarters for students on campus, the President of Finance and Administration oversees business operations for the entire university, and so on. Some clear overlap in terms of a general purpose emerged, though, that was identified in phrases such as providing a "safe living and learning environment," creating "well-rounded future citizens," increasing the "visibility" or "story" of the school's relevance in higher education and its regional area, and maintaining a "compliant" role in ensuring the university's adherence to regulations. Table 1.1 illustrates each of these common phrases by their users.

Table 3 *1.3 Common Phrases of System Purpose Theme*

Providing a Safe Living/Learning Environment	*Creating Well-rounded Future Citizens*	*Increasing the University's Visibility or Story*	*Complying with State and Federal Regulations*
Major of Operations UPD; Assistant Chief of Police UPD; Executive Director Student Health Services; Assistant Director Student Health Services; Director of the Physical Plant; Executive Director of Housing and Residence Life; Vice President of a satellite campus; President of Finance and Administration; University President	Provost; Director of Athletics; Vice President for Student Affairs; Assistant Vice President of Student Affairs; Director of the Office of Student Leadership and Involvement; Director of the Center for Community Engagement; Dean of the Graduate School; Director of the Center for Faculty Development and Academic Integrity; President of Student Government Association; Vice President of Student Government Association	Vice President for External Relations; Chief Communication Officer; Assistant Director of University Communications; Director of Graduate Operations; Executive Director of the Alumni Association; Assistant Vice President for Enrollment & Dean of Admissions; Director of Admissions	Associate Vice President for Human Resources; Compliance and Ethics Director; Title IX Coordinator; Assistant Chief of University Police Department

Thus, purpose is a composite of managerial duties related to the physical and intellectual safety of the school and its population, the social development of that population, the highlighting of the university's attributes in order to increase its presence, and the following of state and federal regulatory policies.

Specific and general responses, however, do not tell the entire story of campus leaders' purpose at the university. When asked what would be a short and long-term risk in the ability to fulfill these purposes, informants (n=21) typically discussed broader needs such as the importance of adapting to a challenging environment in public higher education. Phrases such as "staying relevant," "cutting-edge," and "investing" all pointed toward a future-oriented approach built upon proactive leadership that positions the university at the forefront of higher education. It is not good enough, then, to just manage one's duties within the university system. Campus leaders must be constantly thinking about the future of the entire university, as the Vice President for External Relations explained regarding a recent collaboration with the Alumni Association to increase the university's reach:

> We know we can't have an alumni engagement the same way we've always had it. The world she's a changing, and if we didn't adapt and if we didn't use external voices to help us then I fear we would find ourselves in a crisis and would be totally out of touch with our alumni, friends, investors, stakeholders, and whatever bucket they fall in because if you just sit there and keep doing the same thing over and over and over and over for decade after decade after decade, then you're certain to lose touch. And you're certain to find your organization in the midst of a crisis.

Similarly, the Director of Admissions believed that branching out to find prospective students in new markets around the region and country was the most important purpose because "we know that we can't just keep doing what we've always done. Otherwise we're going to get what we've always gotten, and this is definitely not the business of

where what you've always done is good enough." Staying relevant means that campus leaders must look beyond their silo, too, as the Provost and Senior Vice President for Academic Affairs put it: "We're sitting here in our silo doing our work but these trends will impact us in time. If we're unaware of trends that could erode our financial position or student enrollment then we're falling asleep at the wheel." Having to adapt to a changing environment is also considered a necessity for the Chief Communication Officer because "it's better to be disrupted so we can adapt because the environment is going to be changed. So it's disrupt it ourselves or be disrupted." The Director of the Physical Plant also uses "constant evaluation" to improve physical conditions of the university's learning environment as well as the aesthetic qualities of its living environment, An Assistant Chief of University Police looks "outside the box to prepare for everything" through tabletop exercises of bomb threats and school shootings, and a master plan to expand a satellite campus's infrastructure is something that its Vice President is "always thinking about in terms of how to create areas of growth in the next capital investments and where those are going to be." Thus, campus leaders recognize purpose as the importance of not only adapting to their environment but actively seeking ways to control its risk.

While there is certainly a need to recognize one's purpose as that of an adaptor to a changing environment, turbulence also means that university leaders must recognize the importance of promoting its tried-and-true purposes of creating well-balanced and thoughtful citizens that will eventually contribute positively in society. Thus, a strong component of communicating purpose revealed the importance of continuing ideals of a liberal education in the face of indifferent or hostile audiences. The Dean of the Graduate

School believed that, above all, higher education forces students to interact with people and ideas that they may not be comfortable with, and this is the challenge that campus leaders must address in their purpose moving forward:

> That's one of the things that's neat about college campuses is that you have the potential—if you get your head out of the sand—to be exposed to so many diverse points of view, and that's very valuable… But I just don't think that maybe we do a good enough job of marketing the value of what we do here…and so what you're asking folks to do is to actually sit back, be patient, and learn and consume different cultures, and the idea of diversity and a liberal arts education coupled with the Natural Sciences, and to take that all in, and do folks have the patience for that anymore?

A prominent aspect of leadership at the university, then, is for campus leaders to be its biggest cheerleaders. The Director of the Center for Community Engagement believed that "it's extremely important that we are demonstrating that we are important to society and that we are addressing society's biggest challenges." The Vice President of Student Affairs agreed that "there is a responsibility for us to make sure that we are communicating that value to the political world, you know, our congressmen or senators and state legislatures." The Assistant Director of University Communications felt that "we have to be very attentive and responsive and intentional with our communication so that they feel like (the school) is the place for either them as a student or for their child if they're the parent." For the Director of Compliance and Ethics in the Office of General Counsel, higher education needs to stand up for itself and remind society of its importance:

> I think it's incumbent upon the bulk of the majority to say, wait a minute, you know, we're still here. We want you to learn how to think critically, and we want to be around people smarter than us. You know, hey, there is a process from point A to point B. Now, let's get there, right?...We need to repair, I think, because right now is more sort of existential of who are we, how do we prove that, and that can be an opportunity for higher ed to go back to 'these are our guns.' They've always been there, right, but maybe society has forgotten or maybe we've gotten just used to having everything.

Therefore, the theme of system purpose emerged from questions regarding risk of one's ability to perform short-term and long-term departmental or divisional duties. After discussing these roles, informants quickly looked forward and communicated purpose as an adaptor to a changing environment and as a supporter for the university and what it has to offer society.

Human Risk

The second predominant theme that emerged in regards to the first research question was the emphasis informants placed on risks caused by humans. That is, although there were certainly mentions of natural disasters—especially given the university's location in the Southeastern United States and its recent history of devastation from a hurricane and tornado—informants went into longer detail about risks caused by political, social, and cultural factors that threaten the sustainability of the university. Specifically, human decision making from leadership positions at the school, the state legislature, and the federal administration categorized political factors, failing to educate students on civility and inclusivity categorized social factors, and struggling to

overcome the perception of certain stereotypes of academe categorized cultural factors. Table 1.2 illustrates these subsets of the human risk theme by matching the predominant concern that emerged from each interview. Note that some informants identified multiple factors of the human risk theme.

Table 4 *1.4 Factors Indicated for Human Risk Theme*

Political Factors of funding and compliance	*Social Factors of interaction with hostile viewpoints*	*Cultural Factors devaluing a degree and the institution*
Vice President for External Relations; Provost and Senior Vice President for Academic Affairs; Director of the Physical Plant; Dean of the Graduate School; Director of Compliance and Ethics; Title IX Coordinator; Assistant Chief of University Police Department; Assistant Vice President for Enrollment & Dean of Admissions; Director of Admissions; Director of the Office of Leadership and Student Involvement; Vice President of a satellite campus; Executive Director of Housing and Residence Life; Associate Vice President for Human Resources; Executive Director of the Alumni Association; Vice President of Finance and Administration	Major of Operations University Police Department; Assistant Chief of University Police Department; Director of the Center for Community Engagement; Vice President of a Satellite Campus; Assistant Vice President for Enrollment & Dean of Admissions; Administrative Assistant School of Social Science and Global Studies; Assistant Director of Communications; Executive Director of Housing and Residence Life; Director of the Center for Faculty Development and Academic Integrity; President of Student Government Association; Vice President of Student Government Association; Vice President for Academic Affairs; Assistant Vice President of Academic Affairs	Chief Communication Officer; Vice President for External Relations; Provost and Senior Vice President for Academic Affairs; Director of Compliance and Ethics; Title IX Coordinator; Director of the Office of Leadership and Student Involvement; President of Student Government Association; Director of the Center for Community Engagement; Executive Director of the Alumni Association; Dean of the Graduate School; University President

Initially, however, and in similar fashion to questions of purpose, risk inquiries yielded expected answers. Mentions of risk from severe weather, campus safety vulnerabilities, infrastructure sustainability, and student health (n=14) instantly came to mind for some. In fact, the very first interview occurred during a Hurricane Watch that a Major of Operations in the University Police Department described as somewhat routine compared to other events:

> Like right now the big headaches are tropical storms slash Hurricane-to-be-Gordon and an upcoming home football game…a football game is a great opportunity, but with great opportunity comes great risk…I worry about somebody drunk or 80 years old having a stroke or a heart attack and driving a car into a crowd of pedestrians…It doesn't have to be Al Qaeda. It could just be some 85 year old alumni member.

The Assistant Vice President of Student Affairs remarked that "in this day and age as a student affairs professional, I would be remiss if I didn't have one thought in the back of my head on active shooter scenarios." The Executive Director of Housing and Residence Life was concerned about physical sustainability because he is in charge of "two buildings that are more than a hundred years old and then we have a collection of seven buildings that were constructed in 2010 or more recently… they are aging and we are stressed to keep up with deferred maintenance." The Vice President of Finance and Administration echoed these concerns as well in describing air conditioning and heating units that are aged and too costly to replace. "A constant risk and concern is that our facilities may have a breakdown of some major mechanical system or electrical system that could impact instruction time… we have a huge backlog of deferred maintenance."

In addition, the Director of the Physical Plant wondered "where on Earth are we going to move all that research, all those labs, all those classrooms? How are we going to absorb that? And so that is a risk to instruction time." On a campus that had a recent flu outbreak, too, student health remained a concern that needed constant attention. For example, the Executive Director of Student Health Services, who is tasked with keeping students, faculty, and staff healthy and educated regarding their wellness, spoke bluntly about a disease that has the potential to ravage the campus community:

> Our staff meeting this morning discussed probably one of the most dangerous ones that's out there. Meningitis B is an illness that will present similarly to all other viral illnesses within the first 8 hours. And so the difference is that that particular illness will cause death within 24 hours. It is highest risk between ages 16-25 and that's a college population. It is at highest risk for students or people that are in close captivity, like dorms, barracks, and, you know, that sort of thing, close contact with housing. And so probably our highest risk is definitely Meningitis B for sure. And that is one of the vaccines that is not required. We do recommend it but it is not required for this state.

Therefore, informants identified risks in relation to their positions in protecting campus infrastructure, campus maintenance, campus safety, and student health.

The majority of informants, however, went into greater length to address humanistic factors such as political, social, and cultural factors that posed risk for the future of the university. Political risk (n=15) described the financial burden that public universities face as federal and state spending continue to decline. The Provost and Senior Vice President for Academic Affairs revealed that "we've seen a decline at

(school) of about 25 to 30 percent in state funding…so when state funding or federal funding is changed that impacts what we're able to do or how we respond to those changes." When faced with limited financial support, campus leaders sometimes have to make difficult decisions regarding personnel and departmental expenditures. Although she had only been at the university a handful of years, the Dean of the Graduate School was already familiar with such situations:

> It's always on our minds…I've been here for years, starting my fifth now, and we've had budget cut after budget cut after budget cut. Things look up…enrollment is up and things look better than they were, so we're optimistic that we have stabilized, you know, as an Administration, but we've been dealing with budget cuts as long as I've been here and last December we had to lay off some folks…It wasn't that any particular person was targeted for their job performance. We just couldn't afford the workforce…It was very sad. Yeah, being from a bunch of other colleges and universities, I know that, you know, it's every year: What did we get this year, and what I'm going to do with it?

The Director of the Physical Plant also unfortunately "lost 14 positions in the last two years and that includes elimination of our travel budget, so conferences and stuff." The Assistant Chief of Police believed that a significant risk to his ability to protect the school comes from funding, too. If the school continues to grow in terms of enrollment, programs, and facilities, the police department must also grow because "if the university system doesn't grow its law enforcement just like it grows any department then then we're not going to be able to keep up with who we want to be." The Chief Communication Officer revealed that financial risks are "something that you are always

sort of considering because of how the funding models of institutions across the country especially state institutions have changed…I think that is something that we have our eye on all the time." Perhaps no one described the consequences of financial risk better than the Vice President of Finance and Administration, however, because although the university is eligible to receive state aid as one of its public institutions, political decision makers continue to give less and less. "We're having to sometimes operate more like a private institution, and we're having to put the cost of providing what we do, you know, more on the backs of students." It is worth noting the fallout of such dwindling budgets as she continued in detail:

> I'm not trying to be critical but I just think that they think we have another way to generate revenue that maybe some other entities or state agencies don't so they can make it if we cut their budgets… we're going to lose quality faculty and staff because we can't keep up with the rising salary levels of our competitors… We don't give raises on an annual basis. We don't even give them on a biannual basis. I mean, it's become pretty rare that we have enough funding internally to give raises. For the most part over the past 10 to 12 years raises have been because the state has funded the salary program… next year the retirement system employer match is going up…we don't have any control over things like that. The power that utility rates charge, you know, we have done lots of energy savings measures to lower those costs, but if a public service commissioner approves a raise, we're going to feel the impact of that. Insurance for disasters, you know, that happened across the state or across the region affects rates, and, you know, all of those things that we don't necessarily have control over. If we don't receive some kind

> of increase in state funding, and if it's just going down and the only way we have to pay those costs is to raise our prices, right, and, you know, we're all very sensitive that we really try hard not to do that, but we really don't have another way to exist.

Not all political risks were of a financial nature, though. The Assistant Chief of the University Police Department understood the importance of transparency and mandatory crime reporting required under The Clery Act but was confused to its selectivity. “What we need and what the folks at UCLA Berkeley need are two different things.” He elaborated on the strain that national regulations impose on university security officials:

> It’s tough because you have to put somebody, some resource, some manpower over that…I think some of the regulations can be rolled back. For instance, they want to know how many liquor violations I have had but they don’t want to know how many DUIs I’ve had. See my point? They want to know how many residential or commercial burglaries I’ve had but they don’t want to know how many cars I’ve had broken into or how many book bags I’ve had stolen out of the library. It’s called larceny theft. We include that in our report. I’m very transparent. But it’s not required by Clery…larceny theft may not be a big deal in LA but it’s a big deal down here. We just need to be trusted more because they’ve seen that universities are reporting.

Although only three informants mentioned the recent proposed changes in federal guidelines for how universities should handle sexual harassment and assault on campuses, such an issue could quickly turn into a risk for the entire school. As the Title

IX Coordinator explained, the proposed reversal of regulations guiding the handling of claims passed under the Obama Administration is troubling:

> Well, it's interesting you should ask that because right now many of us who are Title IX Coordinators across the country see the changes that Betsy DeVos may implement as risk in and of themselves, which is a little bit of a dichotomy because, you know, we're mandated to follow as best we can with what the Office for Civil Rights (OCR) requires, but what they may end up requiring or not requiring to many of us feels like a risk to the integrity of the kind of work that we do in these offices.

The Vice President for Student Affairs wondered "what the current Administration is looking at doing with Title IX, there's a risk associated with that, how we manage students, and how does that impact our campus climate? And is it a chilling effect on the victim?" The Director of Compliance and Ethics, however, had a slightly different take:

> They were wanting to govern almost day-to-day activities of the university as it relates to sexual misconduct, giving us very little discretion in how we handle it. The current Administration is giving us more discretion… And so even though the present administration may not be as heavy-handed in its enforcement, I don't see a lot of changes in the way the universities do things, okay, because it's a recognized problem and it's gotten a lot of publicity in the country, and a lot of people are watching what we do, and, rightfully so. Those kind of issues need to be addressed.

The fallout from the federal administration's stance on issues such as immigration and international relations as well as the state's history with discriminatory practices has also

strained those tasked with bringing in prospective students. As the Assistant Vice President for Enrollment & Dean of Admissions frankly spoke, “the approach of the Trump Administration to international students has had a huge impact…people who normally would have a strong desire to come to the U.S. for education maybe feel we've created so many barriers to that.” The Director of Admissions—already facing a declining number of high school graduates and community college enrollments to potentially recruit—is forced to balance unwelcoming policies and perceptions from both the national and local level:

> Let's say for example, the governor of (state), who is a university alum, right?! He has these policies that he's implementing and these public statements he makes affect us…and because it's this (state) and people, you know, like out-of-state students and specifically minority students and their families, that is a concern… It's like, oh, see, I told you guys things haven't changed and so those are things that affect us. Sometimes we don't have any control over it, and we're selling this image of, you know, come to (school). It's a welcoming place. You can be yourself. You can be an individual. But these are the people that are in charge of policy for our state or our country that contradict the image of what we're selling, and that's just such an uphill battle because you have to walk a fine line sometimes, right?

Therefore, as a characteristic of human risk, political factors predominantly described the constraints and anxieties that budgetary decision makers inflict upon a public university, the uncertainty of handling high risk areas like Title IX complaints, and the hostile

climate that prospective students perceive based upon policies and actions of national and local leaders.

In contrast to political risk that came largely from external forces, social risk (n=13) described the vulnerabilities that student, university, and community relationships encounter because of problematic interactions. Such friction limits inclusivity of people and ideas that damages relational development, as the Student Government Association President detailed:

> If there is not a level of trust between the student body and SGA then it's just not effective and the mission is not being met. Students will not attend programs that they don't trust. They won't come to SGA with their concerns or feedback. If they don't trust SGA then they're not going to join us today to get the mentorship. So that's something I would say is an immediate risk that I think about daily.

Creating lasting social relationships is very difficult today because as the Assistant Vice President of Student Affairs put it, "we're so minute-by-minute, moment-by-moment, 30-second sound bite dominated. We're not investing time in each other like we used to…generally speaking that's not just students but everybody." Both students and faculty have damaged relationships with the community, too, as the university's Director of the Center for Community Engagement lamented. "We have students that actually arrange service projects and then don't show up, and then we have research done on community partners where they never received the results. Yeah, so that is a constant risk with our work." A long-term risk to the university's sustainability, then, is "a social climate that in some ways tends to not provide or not give respect to learning," according to the University Police Department's Major of Operations. Even on the granular level, routine

interactions between students and staff become a delicate act compared to previous generations of students, as an Administrative Specialist in the School of Social Science and Global Studies detailed:

> I usually watch what I say because it seems like they get offended faster. So I'm usually very careful with what I say…I used to be able to tell students, hey, maybe you want to try this or that. I haven't done that lately because sometimes you come across too motherly to where they're like, well, I don't need you to be my mother or something like that.

For the Executive Director of Housing & Residence Life, too, students often complain in the form of "'Well, what about me?'…their worldview is constricted…many of them didn't share a bedroom or a bathroom with a sibling. We've got smaller family units. So they're coming to us, I think, from more isolated environments." There's also risk in contracting work out to third parties who may not adhere to appropriate behavioral standards of university leaders. Whispers around campus that construction workers 'catcalled' female students grew to the point where the Director of the Physical Plant had "the subcontractor do an investigation and found out who that was and immediately released him… people that drive by don't know if that's my employee, right?...They're going to assume that it's a university employee, right?" Echoing this sentiment was the Assistant Vice President for Enrollment & Dean of Admissions who believed that just one bad interaction between a member of the university and the surrounding town eliminates an opportunity to bring in new students:

> Every interaction that you have is an opportunity to either recruit a student or retain a student. So students either walk away thinking this is the place for me and

> I want to be here, or this place made me feel at home…whatever that opportunity is, and whether you're in church or in the grocery store, if people know you as an employee at (school), sometimes you're the only (school) they know, and so they associate you with all things that are (school), and so if you're horrible to the checkout girl who happens to be a high school senior and she knows that you're the, you know, administrator over in Polymer Science, and all she knows is that you work here. She doesn't really know what you do or how you interact with students and she thinks in her mind that that person was awful to me and that must be how they do it at (school)…Those are the risks I deal with every day.

A large portion of social risk communicated by informants, then, detailed both a lack of consideration and a difficulty in developing relationships within and beyond the campus community.

College campuses are historically known for their protections of free speech, and such an issue came up for a few participants (n=4) that drew concerns similar to those under social risk. The Vice President for Student Affairs revealed that students often complain about outside speakers who legally occupy free speech zones on campus but cause discomfort because of their religious or political views. After reviewing university policy on free speech and informing Student Affairs professionals to spread the message to the campus community, complaints still showed up in the student newspaper:

> I understand the concept of free speech and fully support the concept of free speech…They get free speech but then they're offended by their messages, and they don't know how to deal with that. I think it's a hard balance for students because they don't understand the line between free speech and hate speech. So

> that line is a much higher threshold than they're comfortable with. So they often will say, 'well, that's hate speech.' It's not quite at that level yet.

While such interactions can make students uncomfortable, administrators tasked with protecting the campus infrastructure will take no chances when they are informed of such an event. The Vice President of a satellite campus said that because the school strives to be inclusive, there is risk in having an "open platform" on "hot-button topics." As such, there is a danger of letting in outsiders who do not respect the university's surroundings. "You think about a campus where you connect and learn but you don't think about walls and fences that try to keep out bad people. So you're constantly trying to find a sweet spot for how you balance out." This notion of delineating between insiders and outsiders is also backed by the Director of Leadership and Student Involvement who is in charge of making sure that student organizations are following proper procedures when holding an event that may include visitors beyond campus. "There's always more of a risk if you're inviting off-campus guests because we just don't know who they are. If they're not students, we kind of lose the ability to control them in some ways." A most prominent example of this social risk, though, was a controversial artifact removed from campus grounds a few years ago that caused the University Police Department's Major of Operations to carefully explain how outsiders can disrupt protests that are meant to be respectful despite ideological differences of campus insiders:

> Now part of that was one of the things we told both organizers was try to not be welcoming to outside groups. And the way we explained it was you are here because you are protesting against something. You're protesting because you love something here. We assume that means that you don't want to burn the university

> to the ground, bust out all the windows, set fire to the rose garden. You're here because you love the university and you wish the university would do something different because you think that is the right thing and we've gone the wrong way. The other thinks the exact opposite but you have that in common. You want us to be better to your way of seeing things. If some people come in from (American city), or (state), or if some people come in from backcountry (state) or (state), they don't give a damn about this university. They have no love for it. They're here to push their message which may not be exactly the same as yours, and they have no reason to leave things nice because they're not going to be here next week. And I think that was a big part of it. Both groups were careful to keep it as a community protest and not an outside groups protest.

Thus, social risk encompassed a variety of damages that can occur from negative interactions by the campus community but also the threats that exist in allowing outsiders to engage in events with the campus community.

Lastly, cultural risk (n=10) described a communication climate that questioned the character of higher education, the value of a degree, and the presumed notion that college should be for the masses. Informants typically lamented that colleges get painted with a "liberal" stereotype. This could not be further from the truth, according to the Title IX Coordinator:

> I'm fully aware that parents help make decisions for their child about what institution they'll allow the child to even consider going to based on their perception of whether, for example, it's politically liberal or politically conservative. I worked at (another college) for several years and it is perceived as

> very, very, politically liberal. The irony is once you're inside there's very strong pockets of conservativism and often that conservativism is coming from students from very wealthy families…I think what it points to is how the image of the institution is informed by what the public thinks and how that sometimes gets turned on its head when students actually come live in this environment, and that's what the educational process is about.

The President of the Student Government Association agreed that every school is different despite being in a regional area known for its conservatism. "Our Senate, I must say, is pretty dang liberal based on the things that they pass…but when I meet other SGAs across the country, you see all ends of the spectrum." For the Director of Compliance and Ethics, though, "liberal snowflakes" are low-hanging fruit for criticizers because "to a large extent universities aren't that, right? You know, the squeaking wheel always gets the grease when you have a few very loud mouth people driving the argument." According to the Dean of the Graduate School, people turn away from higher education because "academics are all left-wing loons, right? That's not true. There are people all over the political spectrum on college campuses with all kinds of religious views and all kinds of views about, you know, what life should be like." The Director of the Center for Faculty Development and Academic Integrity, who also serves as a professor, has to even convince a family member that she is not liberal. "My dad is a super ultra conservative guy, and I think he's pretty horrified that, you know, I'm a liberal faculty member… I teach grammar. It's not conservative or liberal. It's just grammar." So although campus leaders would deny that liberalism overruns the school, they are

nonetheless aware of the perception that it holds in today's conversations regarding risks to a balanced, cultural voice in higher education.

Although financial risk was discussed at length, the fallout from universities having to charge more from students to cover tuition costs over the last few decades has led to a cultural backlash and realization that higher education might not be worth it. While this is not a shocking or new criticism of higher education, it is somewhat unique in that the economy does not function like it once did, as the Provost and Senior Vice President of Academic Affairs pointed out. "For the first time since the baby boomer generation, it's not a guarantee that you will do better than your parents did. And so there's a great deal of concern about employability, and I think that shifts the conversation." This has created tension for students coming in to school, as the Director of the Office of Leadership and Student Involvement pointed out:

> There's a lot more pressure on students who come in with a lot of expectations that may be realistic or unrealistic about what their college experience should look like…I think in the past decade or two it became, like, everyone thought you should graduate high school and go to a four-year college. That's what you should do. It doesn't matter if you want to do that. It doesn't matter if you're going to go into debt. That's what you have to do, right? And it was like a cultural norm, and then we kind of blew it, and, you know, in lots of different ways the landscape changed politically and funding wise and people started to say, why am I getting this degree to leave, you know, $50,000 in debt? What? Why did I do that? And, you know, they're angry, and then they're the ones now that are raising kids that

will get to college and they might tell them: Don't do it. You don't need to do it. I'm still paying off loan debt from when I was in school.

The idea of society expecting too much from higher education was also confirmed by the Administrative Specialist for the School of Social Science and Global Studies. “Students expect a degree that places them instantly into a job or an industry with a certain amount of pay. We've become accustomed to that. It's almost like it started on the individual level and now everyone's expecting it.” Despite the recession of 2008 that caused many Americans to go back to college for post-graduate careers, the Director of Graduate Operations believed that even campus leaders have undervalued a graduate degree. Campus leadership needs to “change the culture to realize the importance of graduate education and the role it plays for (school)…stakeholders consistently overlook the role graduate education plays at this research institution.” Therefore, some campus leaders felt that one cultural factor that presented itself as a risk was the undervaluing of a higher education degree because of its cost relative to societal expectations.

There remained a few examples of a cultural attitude that neglected higher education because some professionals became successful without needing a degree. The Assistant Vice President for Enrollment & Dean of Admissions noted that “there's always a risk of people not believing in us…that is always a really interesting conversation because people are quick to point at whomever didn't need to go through this process.” The Vice President for External Relations added that “not everybody should go to college…the most successful guy I know fixes our heating and air conditioning. We've all made him rich…he used to have one truck and now he's got a fleet all over town.” The

Dean of the Graduate School agreed that not everyone should go to college because they may not have the necessary skills

> but they may have incredible skills in other ways. And so I think vocational training is extremely important. My husband was a vocational teacher, and I can tell you I saw the value of what he did, and it doesn't necessarily mean that those students aren't going to be college bound. But learning to do specific hands-on work is extremely valuable. So if anybody were to knock that I'd say you were wrong. You are wrong.

The Major of Operations in the University Police Department believed that such discourse "may be a cyclical thing. In the 30s and before people did not consider higher education was for everyone…It wasn't until post WWII and the GI Bill that it became an aspiration at least that higher education was something for everyone." Finally, the Vice President of Finance and Administration felt that when individuals succeed despite the limited resources around them, they perceive that those resources are not necessary:

> It's not just a (state) thing. It's kind of across the country. I do think it has something to do with the perception of the public in the value of higher education, and, you know, you've got some isolated cases where people have done really well and they didn't come to college and didn't have a college degree. But all the data really supports that the chances of you making more money is with a degree. I think it's a combination of that perception and then just struggling, you know, our state struggling with revenue generation.

Thus, cultural factors described a risk climate in which the public criticized higher education through liberal stereotypes, questioned the value of a degree earned, and praised those who succeeded without going to college.

In sum, the first research question asked how campus leaders defined and communicated risk at a university. Themes of system purpose and human risk provided a unique look into the concerns and perceptions of a risk climate at a 21st century public institution. Specifically, the theme of system purpose identified larger areas of concern that described leaders' actions in positioning the university as an adaptor to a changing environment. The theme of human risk emerged then as leaders discussed in length the political, social, and cultural factors that threaten not only their departmental or divisional duties but the university's sustainability as well. Table 1.3 summarizes both major themes, subsets, and examples of responses for research question one.

Table 5 *1.5 How do campus leaders perceive and communicate risk within the university?*

System Purpose	*Human Risk*
Campus leaders shared purpose beyond intradepartmental duties through: • providing a safe living/learning environment • creating well-rounded future citizens • increasing the university's visibility or story • complying with state and federal regulations	Campus leaders communicated extensively not on natural risk factors but humanistic ones such as: • Political • Social • Cultural
Campus leaders recognized that fulfilling these purposes required: • adapting to a changing environment to stay relevant academically and economically • advocating for traditional methods and outcomes of higher education such as following a liberal course curriculum and the experience of diverse perspectives	• Political factors included decisions regarding budgets, allocation of resources, state and federal regulations, and the present and potential fallout from failing to address such factors. • Social factors included the relationships damaged through combative interactions between the campus and the community as well as the physical damage that can accrue from allowing "outsiders' onto the campus for controversial events • Cultural factors included the inaccurate stigma of "liberal," rejecting higher ed's price tag, and the success stories of those who accomplished much in life despite not earning a degree

Use of Theory to Conceptualize Risk Action

The second research question sought to identify a potential organization theory to explain both the university's risk definitions and its risk communication practices.

Interview questions that asked about risk procedures, policies, and partnerships identified cooperative relationships within and beyond the university's boundaries that campus leaders employed in communicating risk to their stakeholders. The theme of collaboration described an open system-like approach where informants identified and navigated risk environments by regularly communicating with rival university leaders, contributing to and learning from regional and national association attendances, and increasing interaction with students and financial influencers.

Collaboration

Overall, campus leaders (n=20) detailed an active role in mitigating risk or uncertainty at the university through collaborative relationships and communication styles. Considering the competitive nature of public universities in an age of declining state aid, informants surprisingly responded to questions of handling risk mitigation and environmental uncertainty by immediately providing contacts of similar positions at rival institutions. The Dean of the Graduate School believed such relationships are mandatory if the school wants to not only solve issues but step-up its institutional image. Creating partnerships outside the university in which fellow professionals act as sounding boards for one another can only help establish higher standards for the institution. "I like to compare us to 'peer plus,' or aspirational institutions…I would rather us be striving to do what our peer plus institutions do because it's a little step up, and we don't want to step down, right?" The Athletic Director also added that "most individuals on the outside would be surprised at how much Athletic Directors talk to one another about what they're doing and how they're doing it." Similarly, the Director of Compliance and Ethics belongs to an online forum of attorneys in higher education that helped him navigate

through sports gambling policies as well as cybersecurity issues for international students. After coming from a peer plus institution, too, the Director of the Center for Community Engagement continued to keep learning from other schools:

> I don't know about other fields but ours is an extremely collaborative one…When I worked at (regional rival), we had inquiries every month asking if they could use content off our website, and we would say absolutely but just give us credit…So we actually have kind of an open access type, like, I don't know what you'd call it…I've actually presented on risk management at numerous conferences, okay, just because it's kind of an interest of mine. A lot of my forms that I use are modeled after the California state system. They have a really strong risk management process and a handbook and guidelines.

Conferences and professional organizations provide a great learning experience through comparative issues as well. The Executive Director of the Alumni Association realized that although "we can't do the same thing they do at Stanford because their resources are almost unlimited," attendance at conferences with similar sized schools, budgets, and constraints helped him mitigate the loss of legacy recruits:

> If I see an alum has a child on social media, we send the baby a letter and it's basically saying we're glad that you're going to a (school) home. We look forward to welcome you to the class of twenty thirty three, and we've included a onesie… Two-year olds get a growth chart that goes on the wall… Four-year olds get a coloring book. Six-year olds get a little pencil pouch… Eight-year olds get a calculator…Ten-year olds get a picture frame…Twelve-year olds get a pop socket for the phone…Sixteen-year olds get a keychain… So the hope is that when they

> get ready to make a decision about where they're going to go to school, they'll be making a decision between their family's school that they've known their whole life or somebody that sent them mail because they had a test score… The Council of Alumni Association Executives really had a lot of different ideas about how to attack that…we were able to find some things that other schools did and pull those together with some things that we were already doing and make them more effective.

Similar issues also helped the Executive Director of Student Health Services ensure a safe campus by monitoring patients outside campus walls. Electronic partnerships with local hospitals and providers who share medical information aided in seeing patients to the end of their treatment, or "closing the loop, so to speak, which is very much a risk management thing…That entire loop has to be closed every time they get sent out…So those are definitely collaborative relationships." For the Chief Communication Officer, similar issues bring fellow professionals together both near and far:

> We learn from people in our system. And that's really helpful because a lot of times we deal with the same issues. It could be happening at the state level and affecting us. It could be a legislative discussion or something... I can remember as far as The Boston Marathon Bombing and I had a colleague that worked up there. He called me and I talked him through that. And that's a guy I met at a conference.

Therefore, campus leaders created relationships with professionals from similar roles at institutions both local and national to mitigate risk and address similar concerns in higher education. Such interactions typically discussed risk through a case study approach that

highlighted “best practices,” which was a phrase that appeared often yet escaped elaboration. The Assistant Vice President for Enrollment & Dean of Admissions, though, explained that the failures of others is often a moment of learning, or a best practice, for the institution moving forward. “We are crazy looking for best practices all over the place. We look at institutions like ours…universities absolutely learn from other’s mistakes, and we look at best practices and then we look at places that have failed.” The Vice President of Student Affairs somewhat humorously added that one takeaway from such practices is to not have your failures analyzed for other’s development:

> So we will use other institutions as case studies and say, okay, here's where we went wrong. We'll do presentations on that so that we can all learn from each other because most of the time when there's a mistake made it's not intentional, right?...So we just hope and knock on wood that we're not a case study. That's the goal.

Thus, institutions collaborate to not only help one another solve issues but to also learn from the failures that similar institutions exhibit.

A final subset of the collaborative theme was that all campus members—regardless of stature—communicated consistent optimism, openness, and resolve in the university’s direction despite the presence of risk. Such expressions acted to display the sincerity of the school’s mission as well as its resolve in positioning itself in a sustainable future. Phrases such as becoming a “leader in the future of higher education” appeared whenever discussions of human risk required a solution, and informants were quick to communicate the positives that were being produced in response to those risks. For example, the University President responded to outside voices critical of a potential hire

with a questionable past by communicating resolve. “We knew this person was not indicative of our culture and what we represent as an institution, and so we made sure that we had the final word on that matter.” The President of the Student Government Association also believed that although the recent academic reorganization may be due to the negativity of human risk, it was beginning to strengthen the university as a whole. “(President) wants (school) to be a model across our nation for how higher education should look, and, you know, that’s trickling down to all that that has to do with recruitment, retention, and student satisfaction.” The Vice President of Student Government Association agreed in that although the state’s leadership may not be welcoming to minorities and the LGBTQ community, the initiatives implemented by her (diversity training) and Student Senate (eliminating male and female identifiers in admission applications) communicated the positivity of change that the school is pushing. Leaders are finally being “exposed to the idea of progression and inclusion and what that means and how that looks… we're recognizing the need for change in our state and on our campus and that's something that we're looking to work towards.” The Director for the Office of Leadership and Student Involvement agreed that her duties are changing due to an emphasis towards student retention. “We're not just out here in left field saying let's create this event because it's fun…everything has to fit into that mission to make sure that we are aligned with what the campus administrators say are our strategic goals.” For the Director of Athletics, following the university’s policies on transparency with the campus community and beyond is paramount in making positive decisions moving forward:

> I would say it starts with the President and his cabinet, but then it would trickle down to, you know, parking, police, facilities, and the Deans, etc. I mean, one of the things that I talked about when I took the job was making sure that we were aligned with campus and in the community and not out on an island…both my staff and campus has an understanding that, you know, we are the most visible entity on campus. But a lot of times we are not the most important and so we, you know, we don't make decisions in a vacuum…I talked to a lot of people on campus that are invested in us before we do anything of significance.

An example that stood out on just how far optimism and responsibility traveled throughout the university in its mission to position itself in a sustainable future came from a story that the Director of the Physical Plant recounted regarding a campus visit from a prospective student. Despite the loss of multiple positions and a slashing of his budget, he still believed that it was his responsibility to create an aesthetically pleasing landscape that would attract future students. It wasn't enough to just look pretty, though. His staff needed to communicate kindly and generously to newcomers to match the care taken of the grounds. Such an effort projected the level of service that the university would provide for potential students:

> Well, one of the things that we know is that the data has proven that students considering where they're going to go to college will visit a campus and make a decision of whether or not they're going to go to that institution in less than 20 minutes from the time that they arrive. That decision is going to be based on mainly two factors: one is how the campus looks when they get there…second is going to be the first person they have an interaction with…That could be a

> secretary, my custodian who's out there emptying the trash, or it could be you…I had one of my landscape guys pruning the rose gardens. Well, he saw the group moving through and he had this handful of roses that he had just pruned and he walked up and gave the roses out to the recruitment group…a mother of a girl in the group then went out of her way to contact us…she said that although she hadn't heard of us before, she chose to enroll her daughter here because if somebody at that level cared enough about her experience, she knew that people here were really going to care for her daughter.

The Assistant Vice President for Enrollment & Dean of Admissions rejoiced that the Director of the Physical Plant "is an outstanding partner for that reason. I feel like he gets it…he is an advocate all the way around, but you need everybody on campus to be an advocate." Therefore, following university directives of communicating a welcoming and transparent climate created a positive feel that leaders were actively navigating through risk.

Communicating an optimistic climate regarding the university's future remained a responsibility for those in charge of financial investments, too. The energy with which the Vice President for External Relations spoke exemplified an excitement with new funding opportunities despite the loss of old ones. "The opportunity we've got to move is to increase the philanthropic dollars…I traveled to DC last week and Fort Lauderdale next week…We know where the public aid is headed so we're engaging stakeholders like never before." The Provost and Senior Vice President for Academic Affairs also believed in the promise of the future after revealing a new venture with an engineering group that will bring investment in physical and human capital to the school. Such a venture was

only possible because of the need to look for other revenue streams due to human risk. Therefore, a lesson learned is to always be open through "communicating multi-directionally…the work outside of the gates is just as important as what we're doing inside… we use our expertise to jump into a conversation that needs to occur with those external stakeholders about our future." The school also relied on the Office of University Communications and the Alumni Association to communicate positively about the university's future. The Chief Communication Officer stepped up messaging to the immediate surroundings of the campus because "there's a big economic impact from just the university's presence...even if they've never stepped foot on the campus…you are interested in it thriving and doing well because that does indirectly affect you." The Executive Director of the Alumni Association, however, seemed to relish such risks of future sustainability because they become assets for the future. That is, turning a negative into a positive is a characteristic of the school's culture because it is often overshadowed nationally and athletically by other institutions in its own state. This is what attracts those to the university as they look to prove themselves during times of doubt, and, thus, appropriately described the current state of the university with regards to risk:

> It's perceived as a risk when you see it. But when you really start looking at these things, I mean, they're all opportunities because most of our best programs come from those types of situations, and when you see that one risk you start trying to build around it…I think that the role that we play is we tell the stories of alumni who have come and done that and been successful…in most cases they came to school here and they had some kind of challenge and kind of this internal fortitude that (school) people tend to have that pushed them through… every time I have a

> conversation with alums, ‘I was going along, things were good, and this happened and I hit a fork in the road. My choice was to take the easier route or stick it out and fight through it.’ That's the (school) story that always goes on… hurricanes, tornadoes, no funding…we've always kind of struggled and had a bigger mountain to climb but I think it's going to take that internal fortitude to make the changes that are necessary to keep higher education moving in the right direction.

Therefore, communicating excitement and resolve in the face of risk characterized responses from campus leaders attempting to strategically position the university in the future. Overall, the theme of collaboration emerged from discussions of organizational risk mitigation efforts that displayed a relational pattern of communication with role-similar professionals outside the university while stakeholders within shared excitement and resolve about dealing with risks of the future. Table 1.4 illustrates a breakdown of the collaboration theme and its subthemes.

Table 6 *1.6 Collaboration Theme in Organizing Risk*

Collaboration	*Informants indicating Theme*
• Communicating with role-similar professionals outside the university to mitigate risk	University PD Major of Operations; University PD Assistant Chief of Police; Executive Director Student Health Services; Chief Communication Officer; Assistant Director of Communication; Dean of the Graduate School; Director of Athletics; Title IX Coordinator; Director of Compliance and Ethics; Director of Faculty Development and Academic Integrity; Director of Admissions; Vice President of a satellite campus; Student Government Association President; Director of the Center for Community Engagement; Executive Director of Housing and Residence Life; Associate Vice President for Human Resources
• Communicating positively and with resolve in order to turn risk into opportunity	Director of the Physical Plant; Executive Director of the Alumni Association; Provost and Senior VP for Academic Affairs; VP for External Relations; President of Student Government Association; VP of Student Government Association; Director of Athletics; Assistant VP for Enrollment & Dean of Admissions; VP of Finance and Administration; University President

The collaboration theme entailed both external and internal mitigation efforts by enlisting stakeholders to help with risk. For external collaborators, conferences and professional relationships aided in navigating through risk and uncertainty with

organizational issues. For internal collaborators, stressing to employees that the university is a pleasant, positive, and optimistic destination for potential students and investors was a main priority of risk mitigation. Therefore, both internal and external collaborators used communication to secure human resources of aid with regard to risk.

Two research questions opened discussion from campus leaders as to how risk was defined, communicated, and organized at a public higher education institution in the 21st century. Themes of system purpose and human risk categorized the duties that campus leaders' hold while providing a window into their potential vulnerabilities. Informants defined risk within the overall purpose of sustaining the university during a time of threats communicated as political, social, and cultural factors. Risk became organized through the theme of collaboration where campus leaders practiced risk communication with professionals at other schools and cooperated with university's leadership in communicating optimism, openness, and resolve despite the school's challenges. Table 1.5 showcases themes, subsets of themes, and exemplars. According to MacQueen and Namey (2012), a table of such detail provides a comparison within groups of themes emergent on similar topics and their implicit relationship with one another.

Table 7 *1.7 Applied Thematic Analysis Results Summary*

Theme	*Subsets*	*Sample Exemplars*
System Purpose (RQ 1)	(1) shared phrasings of overall purpose (2) need to adapt to a changing environment (3) need to advocate for traditional purpose of higher education	(1)"safe living/learning environment; creating well-rounded future citizens; increasing the visibility or story of the school's relevance; complying with state and federal regulations" (2) "disrupt it ourselves or be disrupted" (3) "these are our guns"
Human Risk (RQ 1)	Risks communicated through (1) political factors (2) social factors (3) cultural factors	(1)"budget cut after budget cut after budget cut" (2) "they don't understand the line between free speech and hate speech" (3) "there's always a risk of people not believing in us"
Collaboration (RQ 2)	(1) communication with those outside the university for risk mitigation efforts (2) communication of a positive resolve about the university to stakeholders	(1) "most individuals on the outside would be surprised at how much Athletic Directors talk to one another about what they're doing and how they're doing it" (2) "it's going to take that internal fortitude to make the changes that are necessary to keep higher education moving in the right direction"

Therefore, thematic results flowed into one another as a result of a simple study structure. By starting with questions that asked informants to identify their purpose at the university, subsequent discussion identified an overall *system purpose* at the university, *human risk* factors that threatened such a purpose, and a *collaboration* of communication employed to mitigate such risk. The theme of system purpose allowed informants to think

broadly about the university as a whole and their responsibility to its sustainability. The theme of human risk, then, emerged as informants revealed factors beyond natural events that could damage a university's position in the political, social, and cultural climate of higher education. In order to reduce or eliminate such human risks, informants collaborated with role-similar professionals beyond the university as well as communicated a positive resolve regarding the future within the university. Thus, risk was defined, communicated, and organized through a linear fashion that identified shared purpose, risks to such purpose, and communication practices meant to deal with risk at a public higher education institution. A discussion chapter will follow to explore the implications of findings with regard to risk and organizational communication.

CHAPTER V - DISCUSSION

Throughout the course of its history, the American higher education system has adapted to the needs of its audiences. Even before the American Revolution, a wide variety of colleges and universities served different philosophical beliefs about the purpose of education while simultaneously allowing the marketplace to dictate its direction. State institutions secularized education to ensure the survival of a liberal arts training through public funding and oversight; religious-based colleges and private institutions operated through churches and organizations willing to secure funding; land grant universities provided technological instruction to the rapidly growing industries of agriculture and manufacturing; and research institutions grew explosively from the large amount of resources that professors with academic freedom garnered in solving society's biggest problems (Perkin, 1997). The chameleon-like power of the university—satisfying many needs while never really showing a true political color—was not something it had just learned after quickly taking afoot in the United States, however. Since medieval times, higher education occupied a space between morality and government figures that in its own right remained impressive as it stayed beyond reproach:

> In the interstices of power the university could find a modestly secure niche, and play off one authority against another. Unintentionally, it evolved into an immensely flexible institution, able to adapt to almost any political situation and form of society. In this way it was able to survive for eight centuries and migrate, eventually, to every country and continent in the world (Perkin, 1997, p. 3).

Even when higher education encountered crisis, it overcame by adapting to its audiences' needs. When an emphasis on vocational training left American resilience and

intellectual diversity ineffective during the Great Depression, colleges and universities implemented the elective system to reclaim the liberal arts and remind citizens of all the challenges humans had overcome (Hofstadter & Hardy, 1952). When the flood of new students made possible through the G.I. Bill threatened the physical and existential sustainability of operations, higher education responded by training individuals to one day lead a society of "well-informed, thinking, growing, and responsible citizens…all parts of the art of living" (Hogarth, 1957, p. 37). When a postindustrial society grew in the late 20th century, higher education specialized workers in administration and oversight of a service economy (Perkin, 1997). When funding shifted from federal purview to state legislatures, higher education incentivized performance in a quid-pro-quo with public policymakers (Lovell, 2000). Thus, when the challenges appeared, higher education adapted to position itself as ready and capable of not only surviving but *leading*.

What is significant about the above challenges and particularly relevant to the current study, though, is that all of these events were largely caused by external forces. That is, higher education institutions couldn't foresee the stock market crash of 1929 nor passage of legislation guaranteeing educational funding for service-men and women yet after that it still adapted to their instructional needs. Although higher education certainly didn't seek to cut itself off from public funding and overall support, it has responded by taking greater ownership of its financial direction.

However, while the risk of financial instability may appear as one in which outside forces impose, the current study makes clear that it is one that must be handled internally. If risk is commonly boiled down to a calculation of probability, one needs to

look no further than the quantity of messages emerging from the current study that suggest financial trouble manifested or predicted in the near future. So while there is little chance of controlling an emergence of external forces like those mentioned above, the university is communicating control of its system internally as a way to reemerge as a sustainable leader in higher education. For this large task, it needs all of its stakeholders onboard, and, thus, communication of risk provides a unique window into the depths of organization behavior and system purpose.

Systems Theory

Informants definitely indicated a system-like approach towards risk perception, communication, and organization in the current case study. Almost all interviews moved beyond initial talk of departmental duties to discuss the relationships that make up the university as a whole, and, therefore, a larger awareness emerged that was defined through a common understanding of human risk and the need to adapt to it. Such a communicative process represented a wider body of knowledge of partnerships, interactivity, and unified, goal-oriented behavior in thinking of one's self as part of an organizational system (Boulding, 1956). Additionally, the themes helped identify what the organization members saw as its environment, or the boundary that marks where its operations end or are significantly limited. Organizational systems must remain open to the environment or they will cease to exist (Littlejohn, 1978), and this was evident from both the emerged themes of system purpose and human risk.

First, system purpose showcased informants' consistent responses suggesting staying ahead of crisis by preparing to counteract changes in the financial and academic processes in an uncertain future. Systems are ongoing and never stop learning

(Churchman, 1968), and messages of the system purpose theme displayed strong awareness of activity in response to environmental turbulence caused by human risk factors such as decreased political support, social dysfunction, and cultural negativity. Furthermore, discussion of the themes of system purpose and human risk represented an awareness of specific dangers to sustainability despite the fact that some informants were not directly involved in handling them. These responses represented a system's wholeness (Littlejohn, 1978) because all parts—however far removed from daily interaction with one another—were affected by the political, social, and cultural communication of risks by others within the system. As such, an environment formed that indicated turbulence from forces outside one's control in which the internal system had to respond (Shrode & Voich, 1974). For example, low student retention was a major risk compounded by the fact that state aid continued to decline. Thus, student growth and development became a focal point that all members of the system needed to address. From one administrative leader to the next, an emphasis on making do with the resources provided while collaborating with one another in maintaining a positive image of the school in order to attract and retain students was imperative in order to stabilize the university in a time of environmental turbulence. Therefore, a system of communicative behavior becomes noticeable once a failure of it is recognized (Quantz & Boyles, 2011).

Boundary spanners provided crucial maintenance of the system's equilibrium throughout environmental turbulence as well. As high ranking members within an organization operating as a conduit between a system and its environment (Graber, 1992), boundary spanners actively sought information and scanned one's environment to identify risks and safeguarded organizational operations by strategically positioning itself

to avoid them. For example, the academic reorganization displayed in this case study had multiple boundary spanners—the President of the University, the Provost and Senior Vice President of Academic Affairs, the President of Student Government Association, and the Vice President of Student Government Association—who first collaborated externally for the university at conferences and trade gatherings to understand the latest models in higher education structuring. In turn, boundary spanners then spent a year 'testing' the new model internally with students through focus groups, ad hoc committees, and discussions within the university's colleges to gauge potential impact upon the campus community. Similarly, the Vice President of External Affairs positioned the university to capitalize on new investments that only became present after engaging stakeholders beyond traditional boundaries while the Executive Director of the Alumni Association began marketing in nontraditional ways only after collaborating with similar-sized schools' Alumni Directors at an external conference. The emphasis placed on such risk—reorganizing to address cultural risk in the value of an education as well as gaining new investments to address decreased political funding—all point toward acknowledgement of an outside environment that is hostile to the system as a whole. Reorganization also means the system is differentiating itself from other systems in the environment (universities) that are not efficient in adapting or 'leading.' At the same time, differentiating one's self to identify as a strong system capable of adapting means that it also must continue to integrate into the environment from which it pulls resources (Morgan, 2006). By answering to environmental risks and not, say, internal ones of safety and policy, boundary spanners largely indicate a macro level approach to organization that sees itself as a distinct unity in its environment as it continues to adapt to the

resources provided by it. The focus exists on outside voices and resources, not internal or micro level ones, and it is this focus that enables a system to define its purpose. Thus, a system's purpose becomes identifiable once its subsystems are analyzed for their collective purpose (Littlejohn, 1978).

Another interesting example of collaborative boundary spanning and an outside, environmental focus was the Director of Admissions who sought relationships with high school counselors in an increasingly new recruiting environment while simultaneously working to create greater access to *primary* education for students in his own community through external partnerships. In all instances, a turbulent environment—education models becoming outdated, public funding declining, traditional marketing and advertising techniques grown stale, and recruitment needing a larger pool in which to swim in—allowed boundary spanners to "adjust to constraints and contingencies not controlled by the organization" (Thompson, 1967, p. 67). Thus, boundary spanners are enabled with freedom to pursue resources by acting as the organization's 'open' component that seeks traditional inputs like attracting financial support and prospective students from an environment in which such inputs are changing. As Goldhaber (1974) summarized, public universities had succumbed to these risks before and eventually realized that they needed greater involvement with those who contain vital resources:

> The accumulative effect of these (and other) events was a negative attitude toward the university by its voting, tax-paying public, and the ultimate impact of this attitude is now being felt by universities dependent upon legislative budgets, private donations, and foundation grants for their very survival. Today we see many universities engaging in extensive public relations programs, using such

> techniques as speakers' bureaus, rap sessions, visitors' days, television and radio commercials, etc., as they attempt to interact positively with their environment (p. 41).

A system approach to understanding risk, then, not only perceives a common purpose and wholeness in sustaining organizational balance by focusing on risks in the external environment but also notes the ways in which boundary spanners adapted to overcome vulnerabilities impacting vital inputs. Such behavior also reminded leaders of the openness that higher education operates in as risk was attributed and communicated as emanating from the same environmental inputs that sustain the system. Therefore, risk sparked systemic awareness in leader's communication throughout because "the only way to fully understand why a problem or element occurs and persists is to understand the part in relation to the whole…with its placement within and relationship to its environment as primary concerns" (Koskinen, 2010, p. 14).

Risk can offer an opportunity to learn because it throws an organization off its course by interrupting systemic functions. Specifically, risk from political decision makers and a lack of cultural support offered the university the chance to learn from other organizations as to how to engage new revenue streams, recruit unconventionally, market to forgotten stakeholders, and provide educational efficiency. Thus, organizational routines with regard to risk focused on communicating adaptation towards a changing educational environment (reorganization), attracting nontraditional students (recruitment), and branding prospective students (marketing). The theme of human risk, in essence, identified the system as a whole, its purpose, and its action by revealing the weaknesses of vital resources coming to and from the university.

Lastly, system risk was communicated through qualitative voices of a political, social, and cultural perspective rather than a quantitative perspective. The need to adapt to a changing environment due to risk was not seen through probability measurements but a feeling of potential trouble emanating from interpersonal conversations and institutional awareness. As a system, qualitative risk dominated organizational voices in this study by representing the institutional concerns that create historical continuity between organizations and actors (Giddens, 1984). That is, institutions survive because of the continual social practices that live on, and in this case study one such practice was a construction of risk from qualitative factors that mirrored traditional risk discussion regarding higher education (Perkin, 1997). The university also responded in a typical fashion by changing its educational and marketing models (Losco & Fife, 2000). "Organizations are tempted, though not necessarily constrained, to follow the rationale of institutions structuring their field in order to gain legitimacy and thereby optimize their access to the resources they need" (Berthod & Sydow, 2013, p. 206). Therefore, risk discussion in this case study organized the practices regarding it through an institutional lens that was unique to higher education.

Therefore, this case study displayed a strong sense of a system at work with regard to risk. Through communication of one's purpose, boundary spanners indicated the need to adapt to an outside environment of risk largely constructed through human voices. These risks illuminated the environmental energy and resources that are vital to system sustainability. Mitigation efforts regarding risk required boundary spanners to problem solve through external organizational learning while communicating resolve internally with the campus community.

Future research should look to build upon the institutional policies with regard to system risk. Although boundary spanners displayed their capability through communication of risk, faculty voices were not heard to discuss implementation of risk policy. As such, autopoiesis, or a closed systems approach, may shed light on how the flow of information from system to subsystem and all of its components occurs. Also, by providing more component voices, institutional decision making processes can potentially show how risk informs an overall practice and routine regarding all system components. Finally, a weakness that also needs to be addressed in this study is that outside coders were not employed until a codebook had been developed by the principal investigator. Although subjective assessment proved the codebook valid, initial and focused coding needs to be a more transparent process from the beginning of its practice by allowing outside coders to verify code development.

CONCLUSION

The current case study provided rich descriptions of organizational communication about risk at a higher education institution in the 21st century. Despite a common perception that risk indicates physical damage from natural causes, the majority of one-on-one discussions detailed qualitative constructions of risk that could potentially damage the long-term sustainability of the university. Organizational communication regarding risks such as decreased political support, social dysfunction, and cultural negativity from the outside environment came from its boundary spanners, or those with ties to environmental resources vital to the institution. As such, talk of mitigating human risk centered on educational reorganization, influencing political support, seeking new investment strategies, implementing new recruiting methods, and developing new marketing practices. As organizational leaders tasked with processing information regarding resource dependency, boundary spanners collaborated on these risks with others outside the environment to secure energy for the system. Furthermore, boundary spanners communicated through their departments and divisions that employees would also have to be tasked with securing resources, such as interacting positively with potential students in order to create strong retention. Therefore, systems theory provided a strong framework for understanding how the external environment affected internal operations specifically seen through the actions and communication routines of boundary spanners regarding risk.

APPENDIX A – STRUCTURED INTERVIEW GUIDE

1. As a leader of the ____ department/division here at the university, what is the main purpose of your role?
    a. What would be a risk towards fulfilling that purpose in the short-term?
    b. What would be a risk towards fulfilling that purpose in the long-term?
2. Who would you consider to be your stakeholders?
    a. Do you consider them important in mitigating the risks we just discussed?
    b. Can you give an example?
3. When you are uncertain with how to deal with an issue, what are some of the networks you employ in gathering information about it?
4. What do you feel are more significant in terms of future impact for the university: risks from natural elements such as weather and violence, or risks from subjective elements like social cohesion, cultural attitudes, and political decision making?

APPENDIX B – SAMPLE PARTICIPANT TABLE DETAILS

Date	Participant	Location	Length	Context	Takeaway
09/04/2018	Major of Operations – University Police Department	Participant's Office	46:27	Had to be buzzed in with the front desk physically separating; Door was open; Had recently been helping satellite campus prepare for Tropical Storm Gordon; night classes at main campus were already cancelled	**Utilization of the latest risk security philosophy and training; the coordination and communication of the state flag removal**
09/06/2018	Executive Director – Student Health Services	Participant's Office	20:08	Campus had an influenza outbreak the previous summer	**Wanting the school to push for mandatory Meningitis B Vaccine; 'closing the feedback loop' with area hospitals**

09/07/2018	Chief Communication Officer	Lounge of Participant's Building that doubled as a Student Dormitory	44:29	Tropical Storm Gordon had forced the university to close operations two days prior	**'not a 4-6 hour time period where we don't know where the conversation is'; collaborating with similar professionals (Boston Marathon Bombing)**
09/10/2018	Vice President of External Relations	Participant's Office	30:39	State funding had been decreasing steadily in recent years for state institutions that strained the relationship between the institution and the state legislature	**Communication mainly focused on engaging stakeholders in areas beyond traditional investments**
09/11/2018	Provost and Senior Vice President of	Participant's Office	26:47	The university had just begun an academic	**Surprisingly revealing about the financial**

	Academic Affairs			reorganization that reduced the number of overall colleges in an effort to become more interdisciplinary	**picture, academic environment, and overall future of higher education**
09/12/2018	Dean of the Graduate School	Participant's Office	37:56	Had recently been emphasizing the need to push graduate research and professional development programs	**Open with regard to cultural blindness and lack of patience that hurts higher education**

APPENDIX C – SAMPLE MEMBER CHECK

Fourney, S. P. (2019). The collaborative situation: Exploring a university system through risk communication practices. *Dissertation*.

Thank you so much for your participation in this process. I could not have gotten such rich descriptions, sense making processes, and enjoyable conversations without you granting me access to such a sensitive topic. I know that you are very busy, and I can't thank you enough for carving out some time to help me with my research. Thank you for your commitment, kindness, and encouragement.

On the other side of this page is a general description of themes generated from 30 one-on-one interviews across campus with administrative and student leaders. For each theme, you will see if I have quoted you or not. If I have, please read carefully and reply via email whether you are comfortable with the quote or not. If you are not, I would appreciate sitting down or talking on the phone about clarifying. Also, regardless of whether you have been quoted or not, please reply and let me know if each theme aptly describes your feelings on risk at the university. Again, you and the university are anonymous in the report. Only your title is given.

Thank you so much for your time, and please reply back to me before Friday, February 22nd.

Sincerely,

Sean

Themes

System Purpose – represents a combination of performing immediate duties relevant to the position while at the same time recognizing the importance of avoiding risk by adapting to a changing environment in order to position the university as a sustainable, relevant, and profitable system for the future

- For the Director of Compliance and Ethics in the Office of General Counsel, higher education needs to stand up for itself and remind society of its importance: "I think it's incumbent upon the bulk of the majority to say, wait a minute, you know, we're still here. We want you to learn how to think critically, and we want to be around people smarter than us. You know, hey, there is a process from point A to point B. Now, let's get there, right?...We need to repair, I think, because right now is more sort of existential of who are we, how do we prove that, and that can be an opportunity for higher ed to go back to 'these are our guns.' They've always been there, right, but maybe society has forgotten or maybe we've gotten just used to having everything."

Human Risk – risks perceived from *political* (legislature, budgets, and compliance), *social* (student safety during interaction, representing the university in a positive light during interaction, and familiarizing one's self with those who are different) and *cultural* (stigma of "liberal," national backlash against higher education being too expensive, and the recounting of successful people who didn't earn a degree) factors that threaten the sustainability of the university

- (discussing the impact of potential changes in Title IX handling) The Director of Compliance and Ethics, however, had a slightly different take:

"They were wanting to govern almost day-to-day activities of the university as it relates to sexual misconduct, giving us very little discretion in how we handle it. The current Administration is giving us more discretion… And so even though the present administration may not be as heavy-handed in its enforcement, I don't see a lot of changes in the way the universities do things, okay, because it's a recognized problem and it's gotten a lot of publicity in the country, and a lot of people are watching what we do, and, rightfully so. Those kind of issues need to be addressed."

- For the Director of Compliance and Ethics, though, "liberal snowflakes" are low-hanging fruit for criticizers because "to a large extent universities aren't that, right? You know, the squeaking wheel always gets the grease when you have a few very loud mouth people driving the argument."

Collaboration - communicating with those outside the university (conferences, role-similar professionals at other institutions) in order to mitigate risk while also communicating a positive resolve and story about the university to stakeholders within, around, and beyond campus

- Similarly, the Director of Compliance and Ethics belongs to an online forum of attorneys in higher education that helped him navigate through sports gambling policies as well as cybersecurity issues for international students.

APPENDIX D – CODEBOOK

Interview Topic: Purpose of department/division within university system

Question #1

Structural Code Label: Purpose

Structural Code Definition: *Short*: goal-seeking behavior; *Full*: A continual process of adapting to one's environment through intentional thought and action aimed toward fulfilling organizational goals; *When to use*: Apply this code to discussion of departmental functions and individual roles in relation to the university's success; *Example*: adaptation, leadership, student success, economic success, cutting-edge, student retention, faculty retention, staying relevant as an institution, protecting the brand/reputation, protecting the living/learning environment, investing in student, economical, and political relationships, balancing constraints, and applying best practices; *When not to use*: Do not use this code when describing coordination with members outside of the department/division; *Example*: fulfilling purpose with those outside of the department involves coordination with stakeholders or those who partner to obtain mutual goals

Interview Topic: Short-term and long-term risks to sustainability of that purpose

Question 2

Structural Code Label: Risk

Structural Code Definition: *Short:* danger, threat, or vulnerability; *Full:* Realized or potential damage resulting from a failure to successfully mitigate some event. Risk is typically talked about in probabilities and preparing for future consequences; *When to use:* Apply this code to discussion about concerns about the present and future viability

of the department in relation to the university. This can include discussion about natural risk (extreme weather, public safety, public health, etc.) or manmade risk (financial, scandal, attitudes toward higher education, social cohesion, etc.); *Example*: compliance, liability, physical damage, health, not adapting, not knowing, $$; *When not use:* Do not apply this code to coordinated action with those outside the department/division even if risk is mentioned or when discussing lessons learned from past crises or events; *Example:* concerns, issues, etc. that is perceived for future unknown events

Interview Topic: Stakeholders outside the department/division enlisted to help in risk mitigation

Question 3

Structural Code Label: Stakeholders

Structural Code Definition: *Short:* outside members with shared purpose; *Full:* Any individual outside of the department/division who aides in and benefits from mutual risk mitigation efforts with the informant. Such individuals may be part of the campus community or the larger surrounding environment; *When to use:* Apply when informants talk about community effort, needing help from others, mutually beneficial relationships, and everyone doing their part; *Example*: partnerships with others departments, schools, professional organization, students, community members/agencies, etc.; *When not to use:* Do not apply this code when informants discuss mitigating risk without the aid of others within or beyond the university system; *Example*: individual action performed within one's own department in regards to risk mitigation

Interview Topic: Organizational Risk Communication and Theory

Question 4

Structural Code Label: ORC

Structural Code Definition: *Short:* managing risk and uncertainty; *Full:* Scanning one's environment in order to address university vulnerabilities. This typically involves the monitoring of natural, social, cultural, and political events that have not yet occurred but which are approached as unknown and are sometimes described in terms of similar, past occurrences; *When to use:* Apply this code to discussion of future unknowns regarding the natural, social, cultural, and political relationships that the university has or plans to be involved with that may or may not be informed by similar, past occurrences; *Example:* discussions of past crises or incidents in which lessons were learned that inform current opinion on risk; *When not to use:* Do not apply this code to present activity of dealing with risk in the university system; *Example: current risk events or opinions*

APPENDIX E – SAMPLE EMAIL REQUEST

Subject Line: Ph.D. Candidate looking for help in Dissertation Research

Body: Dear _____, I hope your semester is off to a good start. I'm sure you are super busy, but if you allow me a few moments of your time to explain myself and my research interests here at _____, I would really appreciate it. I believe you can help me gain further insight into an interesting area of research while also providing a better understanding of this school's position with regard to risk communication.

My name is Sean Fourney, and I am a fourth year Ph.D. Candidate. I am very interested in the field of risk communication and how this structures organizational relationships, communication channels, and departmental/institutional policy development. I am using a case study approach to identify how ___ views risk communication from these perspectives, and I think you would be perfect to inform me and the communication discipline in this area.

Because of your leadership role and departmental duties, you have not only your own concerns in the area of risk but also those of your stakeholders. These interactions and relationships are my primary interest, and I would love to sit down and ask you to describe and explain how they function in your world. I would prefer to sit down face-to-face at your convenience, but I understand that this is not possible with some. If you are comfortable responding through email or talking on the phone, I would also accommodate that route.

All interviews will be recorded in some fashion (audio in face-to-face or over the phone; emails are saved, etc.).Your anonymity will be protected throughout the process, however, and once the final report is released, all data will be destroyed. The only

identifiers in the final report is your position. There will be no individual or institutional names given. I have spoken with The Office of General Counsel, too, and they have expressed no qualms. I also received a "Review Not Required" from the Institutional Review Board. However, I will still present consent forms to cover the bases, so to speak, but to also offer my deepest sincerity. If you do not feel comfortable, you do not have to participate. If you feel like you may divulge confidential information, I can assure you that I will not publish anything damaging about you or the institution. I'm interested in the process of risk communication, not the "gossip." If you feel that talking in generalities instead of specifics is safer, too, then I would be completely fine with that as well. I just want to get a sense of how a university system internalizes and communicates about its vulnerabilities.

If you are interested in participating, I would appreciate a reply back. If not, I appreciate your time in reading this and helping me with my scholarly pursuits.

Thank you so much, and I look forward to hearing from you soon!

Sean

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